SMITHSONIAN INSTITUTION

UNITED STATES NATIONAL MUSEUM

REPORT ON THE PROGRESS AND CONDITION OF THE UNITED STATES NATIONAL MUSEUM FOR THE YEAR ENDED JUNE 30, 1944

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UNITED STATES NATIONAL MUSEUM,
UNDER DIRECTION OF THE SMITHSONIAN INSTITUTION,

Washington, D. C., October 14, 1944.

SIR: I have the honor to submit herewith a report upon the present condition of the United States National Museum and upon the work accomplished in its various departments during the fiscal year ended June 30, 1944.

Very respectfully,

ALEXANDER WETMORE,
Director, U.S. National Museum.

THE SECRETARY,
Smithsonian Institution.

CONTENTS

	Page
Operations for the year	1
Appropriations	1
Collections	2
Explorations and field work	3
The Museum in wartime	5
Visitors	8
Library	9
Publications and printing	11
Photographic laboratory	12
Buildings and equipment	12
Meetings and special exhibits	13
Changes in organization and staff	14
Detailed reports on the collections	16
Department of anthropology	16
Department of biology	26
Department of geology	45
Department of engineering and industries	56
Division of history	67
List of accessions	71
List of Museum publications	99

CONTENTS

Page

Operations for the year 1
Appropriations 1
Collections 1
Explorations and field work 2
The Museum in maritime 3
Visitors 5
Library 6
Publications and printing 9
Photographic laboratory 11
Buildings and equipment 12
Buildings and special exhibits 12
Changes in organization and staff 13
Detailed reports on the collections 14
Department of anthropology 14
Department of botany 16
Department of geology 19
Department of engineering and industries 24
Division of history 26
List of accessions 27
List of Museum publications 29

REPORT ON THE PROGRESS AND CONDITION OF THE UNITED STATES NATIONAL MUSEUM FOR THE FISCAL YEAR ENDED JUNE 30, 1944

By ALEXANDER WETMORE
Assistant Secretary of the Smithsonian Institution, Director of the United States National Museum

OPERATIONS FOR THE YEAR

APPROPRIATIONS

FUNDS for the operation of the United States National Museum for the year ended June 30, 1944, were included in the appropriation "Salaries and Expenses, Smithsonian Institution," which, as an item in the Executive and Independent Offices Act for the fiscal year 1944, was approved on June 26, 1943. All the Federal activities administered by the Smithsonian Institution, excluding the National Gallery of Art, were covered in one appropriation. That portion of the overtime pay due members of our staff under the War Overtime Pay Act of 1943, not covered by savings in the regular appropriation, was provided for in the first Deficiency Act, 1944 (Publ. Law 279, approved April 1, 1944). Moneys required for the Museum were allotted from the regular appropriation and the Deficiency Act, and are summarized as follows:

Preservation of collections:	
Regular appropriation	$422,765
First Deficiency Act	9,860
Maintenance and operation:	
Regular appropriation	422,439
First Deficiency Act	31,935
Printing and binding	43,000
Total available for the year	929,999

In combining the appropriations of the Smithsonian Institution, the former appropriation "Preservation of Collections, Smithsonian Institution" became an allotment, and the name of the project was changed to "National Museum."

By internal reorganization the project "Maintenance and Operation" was enlarged by adding to it the guard, labor, and char forces formerly included under "Preservation of Collections," as well as the guard force from the project "National Collection of Fine Arts" and laborers from the project "General Administration." This change brought into one project the guard force of the Smithsonian

Institution and the mechanics, laborers, and char force responsible for the maintenance and operation of all the buildings of the Smithsonian Institution, excluding the National Gallery of Art. The considerable increase in funds allotted for "Maintenance and Operation" and the decrease in the allotment for the "National Museum" (Preservation of Collections) as compared with the previous year are explained by this reorganization.

Payment for overtime service of the personnel of the Museum was made throughout the year.

The allotment for printing and binding was the same as for the preceding year. With the restrictions the Museum has placed on its publications during the war period, the sum is adequate except that binding of the valuable reference library is in arrears. The sum now available will be entirely inadequate when the usual program of publication is resumed. Science suffers when publication is restricted. The facts discovered from research on the national collections attain their full utility only when they become generally available to other workers.

The staff was at a low ebb owing to the fact that 1944 was the first full year under the reduced personnel ceiling placed on the Institution. The National Museum lost 55 positions by the imposition of this ceiling, and the man-years of service by permanent personnel dropped from 373 in 1943 to 321 in 1944. Loss from this sharp decrease was felt in all activities of the Museum, from classification, care, arrangement, and study of the collections to maintenance, operation, and repair of the buildings. The ceiling on personnel cannot be blamed alone for this situation, for the acute manpower shortage made it most difficult to recruit personnel in all categories wherever there were vacancies in positions. The condition imposes a most pressing postwar problem on the Institution. While an acute shortage in personnel can be offset for short periods by increased effort on the part of the reduced staff, this cannot be expected to continue. The collections now housed in the National Museum are of such great value to the science, the culture, and the history of our country that their preservation must be adequate under all conditions. The arrearage in the work of the Museum, already considerable, has been increased unduly. Safety demands that it be reduced. To accomplish this, more personnel and more space must be provided.

The need for space has been stressed in previous reports. The situation becomes more acute yearly. Unless provision is made for the continuing growth of the collections, the Museum cannot discharge its responsibility to the Nation.

COLLECTIONS

In summing up the work of this fiscal year it has been interesting again to note the steady inflow of valuable specimens as additions to our great collections in spite of war conditions. These have come mainly as gifts from interested persons, since our usual program of field work has been laid aside except where it has related to some activity concerned with the war. Small sets of natural-history specimens began to arrive in increasing number from members of the armed forces stationed throughout the world, bringing many

useful and interesting things. The total number of specimens received is somewhat larger than that of last year.

New material arrived in 1,159 separate accessions, with a total of 239,640 specimens, distributed among the five departments as follows: Anthropology, 852; biology, 229,546; geology, 3,466; engineering and industries, 1,388; history, 4,388. The increase has come in the fields of biology and history, the others showing slight decreases.

For examination and report 724 lots of specimens were received, covering all the fields embraced in our laboratories, an increase of 43 over last year. Part of these were returned to the senders when the examination was concluded, some were consumed or otherwise destroyed during identification, and some were presented as additions to our permanent collection.

Gifts of duplicates to schools, museums, and other institutions numbered 2,382 specimens. Exchanges of duplicate materials with other collections amounted to 10,634 specimens, and 726 specimens were transferred to other governmental agencies. Loans for scientific study to investigators outside Washington totaled 21,787 specimens. The summary of the collections given below has been adjusted to reflect additions and eliminations from the various series.

Anthropology	711,917
Biology	13,869,472
Geology	2,687,129
Engineering and industries	139,420
History	529,433
Total	17,937,371

EXPLORATIONS AND FIELD WORK

Under the auspices of the Division of Cultural Cooperation of the Department of State, Ellsworth P. Killip, associate curator of plants, visited Colombia during April, May, and June, spending some time in Bogotá for work with Dr. Armando Dugand and his associates upon large collections of Colombian plants recently assembled at the Instituto de Ciencias Naturales. From there he made brief field trips to Apulo and Pubenza, in the western part of the Department of Cundinamarca, and to Monserrate and Fusagasugá. Later he went to Popayán to join the ornithologist Dr. F. C. Lehmann V in an excursion to the Lehmann hacienda at La Capilla and to Páramo de Puracé. Mr. Killip's last 5 weeks were spent with Dr. José Cuatrecasas, Director of the Comisión de Botánica, Secretaría de Agricultura y Fomento, Cali, in examining the herbaria there and at the agricultural school, and in exploring the extensive mangrove swamps about Buenaventura Bay and on the delta of the San Juan River.

Philip Hershkovitz, holder of the Walter Rathbone Bacon Scholarship for 1941–43, returned to Washington in October after spending the better part of two years in Colombia, where he collected in the states of Atlántico, Magdalena, Bolívar, and Norte de Santander. The collection he amassed forms the largest single accession of mammals received by the Museum in the past 25 years.

In Colombia, also, M. A. Carriker, Jr., continued ornithological field work until October under the W. L. Abbott fund, his investigations in northeastern Colombia extending south into Norte del Santander. In November he brought to the Museum the results of

his past two seasons' work, one of the finest collections of birds that has been made in that area.

Dr. G. Arthur Cooper, curator of the division of invertebrate paleontology and paleobotany, in collaboration with Drs. Byron N. Cooper and R. S. Edmundson, of the Virginia Geological Survey, made an investigation of the relationships of the limestones occurring on the flanks of Clinch Mountain in southwestern Virginia and northern Tennessee. Considerable information on these valuable deposits was obtained. The work also furthered studies of those brachiopods that have a significant relation to the classification of the Middle Ordovician strata of the eastern United States. The investigations were made under the Walcott fund of the Smithsonian Institution.

Under the cooperative program between the Division of Cultural Cooperation of the Department of State and the Smithsonian Institution, Dr. Cooper continued study of the geological formations of northwestern Mexico with the assistance of Mexican geologists. He arrived in Mexico City on February 23, and after conferences with geologists in the Instituto Geológico de México, continued on February 28 to the field, accompanied by his collaborator of the previous year, Ing. Alberto R. V. Arellano. After a week's journey the party arrived in Caborca, Sonora, and there established headquarters for work in the desert. Investigation began in the hills northwest of the village and continued in the mountains to the southeast, south, and west, as well as in the vicinity of the village of Pitiquito. Eight days were spent at the mining camp of El Antimonio. On April 11 the party moved to the village of Altar, where sections were visited to the north, south, and east. Field work terminated on April 16. After about 2 weeks in Mexico City, partly devoted to conferences with Mexican geologists, Dr. Cooper returned to Washington, arriving on May 11.

The additional studies outlined have revealed that the Cambrian section extends into the hills northwest of Caborca for about 15 miles farther than previously known and have perfected knowledge of the structure of the Cambrian sediments from Caborca west to the Arrojos Hills, a distance of about 15 miles. In addition to the information acquired on the Cambrian, an enormous sequence of pre-Cambrian rocks was established, running from Pitiquito for many miles to the southeast. The same sequence was determined in several of the ranges south of Caborca. Work at El Antimonio led to the rediscovery of a zone of fusuline fossils, which will be important in establishing the geologic age of the related beds. It also led to the acquisition of more and better fossils from sections not fully covered last year and helped to establish a satisfactory explanation of the structure of the Permian rocks in this complicated area. The work around Altar was of necessity superficial, but during the limited time available a long sequence of Lower Cretaceous rocks was identified, constituting an addition to the geological column for this part of Sonora. The field work was supported in part by a grant from the Walcott fund of Smithsonian Institution.

Dr. W. F. Foshag, curator of mineralogy and petrology, while occupied in work on strategic mineral sources in Mexico, has had opportunity to make observations of the Paricutin Volcano.

During a 2-day trip, C. W. Gilmore, curator of vertebrate paleontology, accompanied by A. C. Murray, visited Plumpoint, Calvert County, Md., to collect a partial skeleton of a sirenian found by William E. Salter. The specimen proved to be the most complete skeleton of this sea-cow yet found in the Maryland Miocene rocks, as it consisted of the skull, ramus, 22 vertebrae, 39 ribs, both scapulae, both humeri, and sternal and fragmentary parts, all representative of a skeleton more than 10 feet long.

THE MUSEUM IN WARTIME

The halls of the National Museum continued to be of great public interest during the year, the total attendance of 1,532,765 visitors being an increase of 177,496 over those of the previous fiscal year. Through an actual tabulation made during the first seven days of each month, it was ascertained that approximately 40 percent of all visitors are men and women in uniform.

While the possibility of enemy attack on Washington became steadily less as the year progressed, measures for safeguarding our visitors, collections, and buildings continued in force. The Smithsonian air-raid defense organization remained in operation throughout the year under the direction of the general defense coordinator, F. M. Setzler. Six practice blackout drills were held at night, and two practice air-raid drills were held during the daytime.

As a result of a recommendation by the Smithsonian War Committee, a conference was held between officials of the Smithsonian Institution and the United Service Organizations, Inc., to organize a free guide service for personnel in uniform in the National Museum. In July 1943 a committee of U. S. O. groups within the city of Washington indicated their willingness to enlist the aid of their hostesses as volunteers for this docent service. Under the direction of F. M. Setzler, head curator of the department of anthropology, a route was established within the Natural History Building and a script prepared and mimeographed describing the exhibitions in the galleries selected for the tour. Since all the volunteer hostesses were employed during the week, classes for instructing them were arranged on Sunday afternoons, from August 22 to October 17, 1943, and on October 24 the first U. S. O. guide service for men and women in uniform was inaugurated. The individual groups were organized by a receptionist in the rotunda near the south entrance of the building. The first tour left at 11 a. m., and other small groups continued at 15-minute intervals until 3:30 p. m. Each tour, covering the exhibitions illustrating the various phases of geology, anthropology, and biology, required approximately 45 minutes. In order to fill vacancies among the hostesses as the work progressed, a second class was instructed during February 1944. During the 35 Sundays from October 24, 1943, to June 25, 1944, a total of 5,325 military visitors were escorted through the building, an average of about 152 people for each Sunday. The tours were suspended in July 1944.

These free Sunday tours for visitors in uniform were much appreciated by those men and women who participated. Many interesting and worth-while reactions were obtained, as indicated by the questions asked and the interest expressed concerning the various exhibition halls. Credit for the success of this service is due to the efforts of

the U. S. O. hostesses, to the excellent cooperation of the U. S. O. headquarters, and to the chairman and head receptionist, Miss Margaret Bledsoe. All have assisted in diffusing knowledge through the medium of the exhibitions.

Throughout the year the collections removed from our buildings as a safeguard were inspected regularly, and careful guard was maintained over them.

While progress in the prosecution of the war toward the close of the fiscal year modified some of the Museum's contacts with the war agencies, we may feel definite pride in the many calls made on us for data and information as well as for the various individual services rendered. These have extended to practically all the laboratories and offices in our organization. Scores of requests came for information on various kinds of animals and plants, these being concerned sometimes with identifications and sometimes with other specific data.

In the division of mammals, Dr. Remington Kellogg, curator, served as chairman of the American delegation at the International Conference on the Regulation of Whaling held at London during January 1944. At the request of the National Research Council, Dr. Kellogg undertook the preparation of text, keys, distribution maps, and illustrations of monkeys known to be susceptible to infection by malarial parasites, to aid in malariological studies in man. Officers of special Army and Navy Units, the staff of the Surgeon General of the Army, Office of Strategic Services, and the Division of Preventive Medicine and Surgery of the Navy, as well as members of the Inter-American Sanitary Institute and Pan American Sanitary Union, were furnished information relative to the distribution and identification of mammals involved in the transmission of diseases and, aided by our facilities and study collections, were given instructions regarding the identification of such mammals.

In the division of birds, Herbert G. Deignan, associate curator, assisted in work concerning maps and geographic names of the Far East and in a compilation of literature dealing with parts of that area.

In the division of reptiles and amphibians, Dr. Doris M. Cochran assisted the Surgeon General's Office in the preparation of lists of Asiatic reptiles. In the division of fishes, aid was furnished various agencies concerning dangerous, poisonous, and useful fishes, methods of fishing, sound-making fishes, and emergency fishing equipment.

In the division of insects, many identifications, particularly of mosquitoes, mites, and ectoparasites, were made for the Army and Navy, and the units submitting such material were also supplied with much information on the habits of the forms represented in the identified material. Assistance was given the Army Medical School and the National Naval Medical Center, as well as various Army and Navy training centers throughout the country, by supplying well-preserved material of insects and Acarina that are involved in human health problems. About 1,200 specimens were specially mounted on pins, and approximately 450 slide mounts were made for such training centers. During the year nearly 200 Army and Navy officers, who were being assigned to malaria survey or control units, or to other activities concerned with human-health problems, have received some instruction or other help from personnel of this division. The Division of Medical Intelligence of the Surgeon General's Office has been provided with detailed information on the medical insects

occurring in specific foreign areas. This information was placed on cards and the files were so organized as to permit their effective use.

At the request of the National Research Council, Dr. Paul Bartsch, curator of mollusks, served as a member of a committee charged with the preparation of a list of helminth parasites and their intermediate hosts of the Southwest Pacific. The list of known or suspected molluscan intermediate hosts was prepared in the division. Information regarding corals and coral reefs in the Bahaman-Caribbean region, as well as in the western Pacific, was furnished the Navy Department on several occasions.

In the division of plants, in addition to many minor inquiries from various war organizations, Dr. E. H. Walker, assistant curator, prepared an account of the emergency food plants of the Tropics. In the section of diatoms, in addition to supplying information regarding marine and fresh-water algae and examining samples of material involved in the fouling of ships, mines, and other marine structures, the associate curator, Paul S. Conger, prepared a bibliography covering the value of plankton as food.

Service in the department of anthropology included a wide variety of matters—identification of hallmarks on purportedly stolen foreign silver; suggestions for tropical and Arctic clothing; water supply and population statistics on Caribbean Islands; primitive weapons of Pacific and Indonesian peoples; Oceanian boats; Oceanian foods; fish pemmican in Micronesia; house types in Burma; degree of western influence in certain islands of the Pacific and in the Philippines; average stature of men and women of peoples of Europe, Africa, and Asia; photographs of Oceanian, Japanese, Chinese, and other Asiatic peoples; Hindu caste marks; Central American Spanish art; food supplies, containers, footgear, and leather products of North African peoples; footgear for aviators; primitive and European armor; musical instruments for rehabilitation of wounded soldiers; also a number of detailed projects dealing with the Philippine Islands and the islands of the Japanese mandate. Information based upon the department's collections was given also on the resources of certain strategic areas, and of the peoples or tribes inhabiting those areas, with a view to conserving space on ships bound for those regions. Of scarcely less importance was assistance given in the identification of tribal culture patterns, chiefly of the island peoples of the west Pacific area and of continental southeastern Asia.

The division of physical anthropology supplied the Office of Strategic Services with photographs of various eastern physical types. It also supplied detailed data on average body weight for Europeans and various peoples of the Far East to the Office of the Quartermaster General. The curator of physical anthropology, Dr. T. Dale Stewart, was released for a 6-months' furlough to the Washington University School of Medicine in St. Louis, Mo., to teach anatomy to Army and Navy medical students. The associate curator of archeology, Dr. Waldo R. Wedel, was detailed for special service to the Military Planning Division, Office of the Quartermaster General, War Department, from September 1, 1943, to March 1944.

In the department of geology, two members of the staff, in cooperation with the Geological Institute of Mexico, continued field studies in the economic geology of that country as a part of the war effort. Curator W. F. Foshag spent the year on detail from the Museum in a

continuation of the supervision of surveys for strategic minerals in Mexico. Dr. G. A. Cooper, similarly, spent three months in the field in Sonora concluding studies begun last year on the stratified rocks. The results, soon to be published, will be useful in the location of new mineral areas. Dr. Cooper also concluded field work on the project dealing with the subsurface geology of the Devonian rocks of Illinois, obtaining information for use in the oil development of that and neighboring States.

Members of the geological staff in the home office have been more occupied than ever before in furnishing information to the various war agencies. These services have included such diverse items as the preparation of analyses, assisting in selecting and grading calcite for the War Production and other Boards, editing a scientific volume for an allied country, and furnishing information of all kinds to an ever-increasing number of service men and women visiting the Museum.

Other services, especially from the department of engineering and industries, have included the following: Construction of two demonstration models of new ordnance devices for the National Inventors Council; transfer of a series of model buildings to the War Department, Corps of Engineers, Camouflage Section; information on revolving airfoils to the Technical Data Laboratory, Wright Field, Dayton, Ohio; furnishing photographs for Navy training films; identification of woods; information on properties and uses of woods for the Navy Department, War Production Board, Foreign Economic Administration, and Inter-American Development Commission; methods of preserving specimens of dehydrated foods for the War Food Administration; advice on disposition of hemp produced in Kentucky to the Commodity Credit Corporation; assistance in drawing up contract specifications involving a true lockstitch in sewing safety seams, to the U. S. Maritime Commission; suitability of palmyra fiber as a substitute for rattan for stiff brushes to the Navy Department; and aid in the training of document inspectors of the Federal Bureau of Investigation in identification of various printing processes.

VISITORS

The number of visitors to the Museum buildings during the year showed an increase of 177,496 over the previous year. The total number, 1,532,765, is, of course, far below the peacetime record of 2,408,170 in 1937–38, but the increase does indicate a salutary uptrend in the degree to which the National Museum exhibits and collections are being viewed and studied by the people even in wartime. August 1943 and April 1944 saw the largest number of visitors, 162,016 and 164,221, respectively, being recorded for these months. Table 1 shows the number of visitors to the various Museum buildings during each month of the year.

Since a considerable proportion of the visitors consisted of men and women in the armed forces, special services were proffered this group and every effort was made to enhance their visits. In the Natural History Building a program of Sunday docent service, for guiding parties through the Museum, was inaugurated. A number of women U. S. O. volunteers were especially trained to act as guides, and the "tours" conducted by them proved very popular. During the period

covering the last 35 Sundays of the fiscal year, over 5,000 members of the military personnel took advantage of this guide service. A fuller account of this program is contained elsewhere in this report. In the Smithsonian Building, information service for visitors was maintained. The information clerk handled 11,082 separate inquiries for information, distributed 2,427 soldier greeting folders, gave out 602 of the Smithsonian Institution historical brochures, and supervised a free-magazine table for service men and women. In the Arts and Industries Building, picture postcards of Smithsonian scenes were distributed free to men and women in uniform. Up to January 1944, when the special edition of these cards was exhausted, 50,000 sets (300,000 cards) had been so distributed by the Institution.

TABLE 1.—*Visitors to the Museum buildings during the year ended June 30, 1944*

Year and month	Smithsonian Building	Museum buildings			Total
		Arts and Industries Building	Natural History Building	Aircraft Building	
1943					
July	26,445	46,576	43,973	16,100	133,094
August	33,389	59,715	49,449	19,463	162,016
September	23,664	45,033	38,186	13,487	120,370
October	26,782	49,434	43,552	14,397	134,165
November	22,460	41,301	43,103	12,666	119,530
December	15,348	26,907	27,098	9,026	78,379
1944					
January	21,478	39,519	35,385	12,712	109,094
February	21,670	38,374	36,360	12,269	108,673
March	22,549	45,907	36,692	12,926	118,074
April	31,466	67,254	46,822	18,679	164,221
May	26,625	51,385	45,598	15,318	138,926
June	29,336	55,091	47,021	14,775	146,223
Total	301,212	566,496	[1] 493,239	171,818	1,532,765

[1] Not including 3,684 persons attending meetings after 4:30 p. m.

LIBRARY

The experience gained in the first year and a half of the war enabled the staff of the Museum library to begin the past fiscal year better prepared to meet and to adapt its services and facilities to changed conditions. Unpredictable earlier, it was now possible to know not only the kind and character of many of the difficulties arising and of the changes of emphasis certain to continue for the duration but even to foresee others that must be met, and consequently to settle into a better stabilized wartime routine. From the point of view of work done for the war effort, under wartime conditions, the records show that the year was a good one.

The degree to which the library was used directly by various war agencies and by individuals in the armed forces was almost double that of the preceding year, and 520 requests for information came from these sources alone. Some of them were simple questions that could be easily answered, but many of them required considerable research. As was noted in last year's report, an interesting postwar story could be written about the variety of subjects covered by these

questions, and the surprising conversion to wartime uses of literature resulting from the most unwarlike pursuit of scientific investigations, especially in the field of the natural sciences.

No statistical record was attempted of the extensive use of the library made indirectly by the war agencies through the liaison of the Ethnogeographic Board.

In the library services to the curatorial staff of the Museum it was no longer possible to distinguish definitely between war work and nonwar work. Routine requests for books and bibliographical assistance were much the same in kind and number as in normal years. The difference lay in their purpose, since so many of the Museum staff not actually on war duty elsewhere were almost wholly occupied with war assignments needing their highly specialized knowledge.

There was little difference from last year in the accessions of books and periodicals. The number of periodical parts received both by purchase and by exchange fell off somewhat, but most of the still-continuing scientific serials from allied and neutral countries reached the library with gratifying regularity and with a minimum of loss of individual numbers.

Among the noteworthy acquisitions of the year were 120 volumes and 1,850 pamphlets on Cambrian stratigraphy from the library of the late Dr. Charles E. Resser, and 8 volumes and 750 pamphlets on beetles from the library of the late Dr. M. W. Blackman. As they have long been accustomed to do, many members of the scientific staff and other friends of the Museum generously gave copies of their own publications and other useful and important books and pamphlets.

The cataloging of currently received material was practically up to date at the end of the year, in spite of illness among the staff and a still-vacant cataloging position. The temporary services of a subprofessional cataloger helped considerably to prevent a mounting arrearage of current work that might otherwise have become difficult to reduce.

Again a generous allotment of funds for binding made it possible not only to send off newly completed volumes of periodicals to be bound but also to make some further inroads in the binding "backlog." Of the 1,951 volumes returned from the bindery, 900 were part of the 1,550 prepared and sent this year, while the rest had been sent toward the close of last year.

The physical condition and the appearance of the library were greatly improved by the completion of the extensive rearrangements undertaken to relieve the overcrowding of the shelves in the Natural History Building. So serious was the overcrowding that even after the transfer of about 2,000 volumes to the Arts and Industries Building there was little room for actual expansion, and almost every book in the stacks had to be shifted to make space in the right places for hitherto unshelved or improperly shelved books and periodicals. In the process, however, the shelves were read and put in order, and not a few "lost" books came to light. The provision of adequate room for future growth is still an unsolved problem.

Changes on the staff included the resignation of Mrs. Daisy F. Bishop, library assistant, on January 25, 1944, and the appointment of Mrs. Marie Boborykine to succeed her, on March 14. Mrs. Carmen G. Randall was given a temporary appointment as library assistant on September 30, 1943, succeeding Miss Ruth Newcomb, who served

from August 24 to September 6. Miss Marie R. Wenger was promoted to the position of librarian in charge of cataloging, and Mrs. Mary A. Baer was promoted to the position of librarian, continuing in charge of the Arts and Industries branch library. Samuel A. Jones was promoted from assistant messenger to messenger.

Statistics

Accessions of cataloged publications and bound periodicals	3,726
Volumes, pamphlets, and maps cataloged	4,794
Periodical parts entered	5,607
Cards added to catalogs and shelf lists	20,619
Volumes bound or rebound	1,951
New exchanges arranged	134
Circulation of books and periodicals (exclusive of intra-divisional circulation from sectional libraries)	10,310

The estimated number of volumes and pamphlets now in the Museum library is 230,693. Not included in this figure are incomplete volumes of periodicals and the large collections of pamphlets on special subjects in the sectional libraries.

PUBLICATIONS AND PRINTING

The sum allotted for National Museum publication requirements for the fiscal year 1943–44 was $43,000, the same amount as for the preceding year. This allotment was apportioned as follows: $30,000 for the printing of Museum Bulletins, Proceedings, and the Annual Report; $9,000 for binding; $4,000 for the salary of the Museum printer. Twenty publications were issued—the Annual Report, 4 Bulletins, 1 Contribution from the National Herbarium, and 14 Proceedings papers. The publications are listed on page 99. Volumes bound totaled 1,550.

The distribution of volumes and separates to libraries and individuals on the regular mailing lists aggregated 33,847 copies, while in addition 6,970 copies of publications issued during this and previous years were supplied in response to special requests. The mailing lists have been carefully revised to avoid loss in distribution.

Early in the fiscal year, the Museum editor, Paul H. Oehser, brought to a close his work as editor of the Proceedings of the Eighth American Scientific Congress when volumes 10–12 of that series were published and distributed. This work had been in progress since 1941 in collaboration with the Division of International Conferences, Department of State. The editor continued also as chairman of the Efficiency Rating Committee of the Smithsonian Institution.

Indexing.—Notable advancement was made during the year on the comprehensive index to Museum publications, which has been in progress since 1933. With the exception of seven or eight annual reports, all volumes have now been indexed down to the year 1900. The index at present comprises approximately 235,000 cards.

The indexing of current volumes of Proceedings was kept up to date, indexes and tables of contents for three volumes (91–93) being published during the year. In addition to what time the editor and his assistant, Gladys O. Visel, were able to devote to the indexing work, considerable help was rendered during the year by Mrs. Marguerite W. Poole, information clerk.

Museum print shop.—F. W. Bright was detailed by the United States Government Printing Office, as in former years, to print labels and special forms at the Museum print shop, a branch of the Government Printing Office. Requisitions submitted for printing numbered 146, and Mr. Bright completed 131; in addition 7 that were submitted during the previous fiscal year were finished, a total for the year of 138. Seven of the 15 unfinished requisitions represent specimen labels involving long press runs and 8 cover large exhibition labels requiring much hand setting of type. With the exception of these, the work of the print shop is up to date.

PHOTOGRAPHIC LABORATORY

The Bureau of American Ethnology, the National Collection of Fine Arts, and the National Museum have continued their cooperative arrangement with the photographic laboratory. Under this the laboratory has made 3,205 negatives (including 120 microphotographs) 13,533 prints, 314 lantern slides, 2,060 enlargements, and 35 transparencies (including 13 in kodachrome). It has also developed 27 rolls of film, 5 film packs, 73 paper negatives, and 135 cut films. In addition it copied 1,049 pages in microfilm, mounted 624 prints, retouched 286 negatives, and cut 8 mats. Much of this work has been in connection with the preparation of illustrations for the Smithsonian War Background Series of publications, with the work of the Ethnogeographic Board, and other matters related to Smithsonian activities in the war effort.

Under a reorganization effected during the year the curatorial work on the photographic collections in the Museum, which pertains properly to the division of graphic arts, was separated on November 9, 1943, from the activities of the head photographic laboratory.

BUILDINGS AND EQUIPMENT

Repairs and alterations.—Repairs to the service roadway around the Natural History Building, begun last year, were completed in October. Although these were only of an emergency nature, it is felt that they have put the roadway in very good condition and will furnish a perfect foundation when funds become available for complete resurfacing.

Most of the other building repairs were of a routine, maintenance nature and need no special mention. Painting, as usual, was the biggest item. The largest paint job completed was the repainting of the walls and ceiling of the "chapel" and ceiling of the west range in the Smithsonian Building. In progress at the close of the year was the painting of the exterior of the window frames and sashes in the west end of the Smithsonian Building, a rather difficult and lengthy procedure because of the complexity of some of these old windows.

Scrap-metal and paper salvage.—As a contribution to the war effort, the collection of scrap metal in Museum buildings was continued. During the year 2,350 pounds of junk metal and 1,250 pounds of salvaged tin cans were collected and delivered, respectively, to the Procurement Division and the District of Columbia Salvage Committee. More than 6 tons of waste paper were collected.

Heat, light, and power.—The steam used during the year for heating the various Museum buildings amounted to 63,445,800 pounds—about 8,500,000 more than for the previous year. All steam is furnished by the Government's Central Heating Plant. Electric current used amounted to 1,510,510 kilowatt-hours.

An important maintenance job completed in June was the rewiring of the tunnel from the Natural History Building to the Smithsonian Building, where through corroding the old conduit line had become hazardous.

Ice production.—Ice for the Museum's use manufactured by the refrigerating plant amount to 197.9 tons, at a cost of $1.15 a ton.

Air-raid and fire protection.—The usual weekly air-raid alarm tests, and periodic inspections and maintenance of water barrels, fire pumps, fire extinguishers, and other equipment, were made. The fire and burglar alarm systems functioned efficiently.

Furniture and fixtures.—Furniture added during the year consisted of 5 exhibition cases and bases, 287 pieces of storage, laboratory, and other furniture, and 2,426 drawers, boxes, and wing frames. Condemned and disposed of were 28 exhibition cases and bases, 120 items of storage, laboratory, office, and other furniture, and 166 drawers and boxes of various kinds. An inventory as of June 30, 1944, showed on hand: 3,522 exhibition cases, 20,368 pieces of storage, office, and laboratory furniture, and 116,466 drawers, boxes, and wing frames.

MEETINGS AND SPECIAL EXHIBITS

The Museum has continued its practice of making its auditorium and lecture-room facilities available for the use of scientific, educational, welfare, and governmental organizations and groups. Especially in wartime do such groups, particularly local ones, find it convenient to use these facilities for their meetings, and as far as possible the Museum is glad to assist in carrying out their programs. In all, 139 such meetings were held during the year in the auditorium and room 43, Natural History Building.

A series of 17 special exhibits were held during the year in the foyer and adjacent space of the Natural History Building. These, listed chronologically, were as follows:

July 1 to August 31, 1943: Exhibit of anthropological specimens from the Pacific area, from the Aleutian Islands through Micronesia and the Melanesian Islands, prepared by the department of anthropology.

September 1 to 30, 1943: Exhibit of photographs conducted by the National Photographic Society.

October 6 to 31, 1943: Exhibition of paintings by Zeferino Palencia, of Mexico, sponsored by Señor Dr. Don Francisco Castillo Nájera, Ambassador Extraordinary and Plenipotentiary of Mexico, and by the Pan American Union.

October 13 to November 1, 1943: Exhibit illustrating the theme "Bali—Background to War," prepared by the Museum of Modern Art, of New York.

November 1 to 30, 1943: Exhibit of wild-flower paintings, by Mrs. D. Werden Scott, of San Saba, Tex.

December 3, 1943, to January 3, 1944: Exhibit of water colors of Mexico by Walter B. Swann, of Omaha, Nebr., sponsored by Señor Dr. Don Francisco Castillo Nájera, Ambassador Extraordinary and Plenipotentiary of Mexico, and by the Pan American Union.

January 1 to 31, 1943: Exhibit of arts and crafts made by Service people in various U. S. O. centers throughout the country, sponsored by the United Service Organization.

January 7 to 31, 1944: Exhibit of water colors and block prints by Ralph H. Avery, C. Sp. (P.), U. S. Navy.
February 4 to 27, 1944: Exhibition of paintings by John Mix Stanley, 1814–1872, his daughter-in-law Jane C. Stanley, 1863–1940, and her daughter Alice Stanley Acheson, of Washington, D. C.
March 1 to June 30, 1944: Exhibit of emergency rescue equipment, sponsored by the U. S. Coast Guard.
March 1 to 31, 1944: Exhibit of photographs illustrating the Belgian Congo at war. Photographs by André Cauvin, of the Belgian Information Center.
April 1 to 30, 1944: Series of photographs by members of the Army Map Service, entered in a contest by that organization.
April 1 to 28, 1944: The Carl Moon exhibit of Indian portraits. Gift, through the artist, of Mrs. Florence Rand Lang, of Montclair, N. J.
April 29 to May 3, 1944: Biennial art exhibit sponsored by the National League of American Pen Women.
May 2 to 29, 1944: Exhibit of portraits of leading American Negro citizens by Mrs. Laura Wheeler Waring, of Philadelphia, Pa., and Mrs. Betsy Graves Reyneau, of Washington, D. C.
May 3 to 31, 1944: Continuation of the Carl Moon exhibit of Indian portraits.
June 2 to 29, 1944: Exhibition of mural paintings from the caves of India, by Sarkis Katchadourian.

CHANGES IN ORGANIZATION AND STAFF

The year saw no major change in the organization of the National Museum, but some work was done in allocating positions to their proper grades under the Classification Act on the basis of the duties of each position.

Honorary appointments were conferred on Maj. Edward A. Goldman as associate in zoology, on August 1, 1943; Dr. Floyd A. McClure as research associate in botany, on April 21, 1944; Dr. J. B. Reeside, Jr., as custodian of Mesozoic collections, on June 19, 1944; and Clarence R. Shoemaker, as associate in zoology, on April 1, 1944.

In the department of biology, Dr. David H. Johnson, associate curator, division of mammals, was furloughed for military duty on November 15, 1943, and Dr. Richard E. Blackwelder, associate curator, division of insects, was furloughed temporarily for war work on August 23, 1943. Other changes were the resignation on March 22, 1944, of Walter A. Weber, assistant curator, division of birds; and the retirement of Clarence R. Shoemaker, associate curator, division of marine invertebrates, and of Julian S. Warmbath, taxidermist, the latter vacancy being filled by the promotion of Watson M. Perrygo on December 9, 1943. Under the section of diatoms, Paul S. Conger was appointed on March 9, 1944, as associate curator.

Through the death of Dr. Charles E. Resser, Dr. G. Arthur Cooper was advanced to the curatorship of the division of invertebrate paleontology and paleobotany, department of geology, on October 2, 1943, Miss Marion F. Willoughby, scientific aide, transferred to the U. S. Geological Survey on October 31, 1943.

In the department of engineering and industries, Dr. A. J. Olmsted, chief photographer of the Museum, was relieved of this position on November 9, 1943, and was placed in charge of the section of photography, which he so ably developed. Gurney I. Hightower succeeded Dr. Olmsted in charge of the photographic laboratory of the Museum, assisted by Floyd B. Kestner, on January 9, 1944.

Other changes on the administrative staff during the year were the retirement of Royal H. Trembly, superintendent of buildings and labor, who was succeeded by Lawrence L. Oliver, on December 10,

1943. Anthony W. Wilding was assigned to the position of property officer on December 21, 1943 by transfer from the Bureau of American Ethnology. The vacancy caused by the death of Miss Helen A. Olmsted, personnel officer, was filled by Mrs. Bertha T. Carwithen on February 1, 1944, and Mrs. Margaret L. Vinton was appointed personnel assistant on March 9, 1944.

Employees furloughed for military duty during the year were as follows: Robert L. Bradshaw, on October 12, 1943; Joseph R. Burke, Jr., on October 13, 1943; John Carl Carter, on May 5, 1944; Walter McCree, on April 3, 1944; and Dr. David H. Johnson, on November 15, 1943. Ernest Desantis returned to duty from military furlough on October 18, 1943.

Eleven persons were retired during the year through operation of the retirement act, as follows—Through age: William Rice, laborer, on September 30, 1943, after 15 years 3 months of service; Thomas J. Shannon, guard, on April 30, 1944, with 18 years 6 months of service; and Clarence R. Shoemaker, associate curator, on March 31, 1944, with 33 years 4 months of service. By optional retirement: Royal H. Trembly, superintendent of buildings and labor, November 30, 1943, with over 49 years of service; Bertie Turner, attendant, on November 30, 1943, with 32 years 6 months service; and Julian S. Warmbath, taxidermist, with 15 years of service. Through disability: Eugene C. Miller, guard, on December 9, 1943, with 6 years 1 month; Cecil R. Mulnix, guard, on March 31, 1944, with 13 years 7 months; Arthur G. Rodgers, guard, on November 10, 1943, with 8 years 5 months; Ann M. Stokes, laborer, on October 4, 1943, with 18 years 6 months; and Charles O. Watson, laborer, on April 5, 1944, with 35 years 3 months.

Through death, the Museum lost five employees from its active roll during the year: Dr. Charles E. Resser, curator, division of invertebrate paleontology and paleobotany, on September 18, 1943, after 29 years 5 months of service; Miss Helen A. Olmsted, personnel officer, on January 11, 1944, after 43 years 9 months; Benjamin F. Coe, guard, on March 1, 1944, after 25 years 5 months; George E. Matheny, guard, on July 20, 1943, after 24 years 6 months; and Cornelius S. Jones, laborer, on March 17, 1944, after 32 years 6 months.

From its list of honorary workers, the Museum lost by death on September 5, 1943, Dr. Aleš Hrdlička, associate in anthropology since April 1, 1942, and on February 22, 1944, Dr. E. O. Ulrich, associate in paleontology since June 9, 1914.

DETAILED REPORTS ON THE COLLECTIONS

DEPARTMENT OF ANTHROPOLOGY

(FRANK M. SETZLER, *Head Curator*)

ANTHROPOLOGICAL specimens continue to be used by investigators from military organizations and wartime agencies, those collections from remote areas and little known primitive peoples being especially significant. The greatly reduced staff has given priority to all requests from war agencies in supplying data and in preparing scientific reports related to certain theaters of war. The numerous requests from war agencies for well-documented specimens of a perishable nature emphasize the need for constant care in the preservation of such objects at all times. Even though field work has been held in abeyance for the duration of the war, the regular routine assignments, special exhibitions, and the reduction of backlog extend the efforts of the present reduced staff to the maximum.

From August 1943 to the end of the fiscal year the head curator directed the special guide service for military visitors, which was inaugurated through the cooperation of United Service Organizations, Inc., and the Smithsonian Institution. This activity is described on page 5. The head curator attended weekly conferences of the Committee on Personnel Utilization and the Committee on Workload; served as secretary of the Advisory Board of the National Park Service and attended a conference of the board in Chicago; and continued as general defense coordinator for the Smithsonian buildings on the Mall except the National Gallery of Art.

Dr. Waldo R. Wedel, associate curator of archeology, was detailed for special service as needed to the Military Planning Division, Office of the Quartermaster General, War Department, from September 1, 1943, to March 1, 1944. The curator of physical anthropology, Dr. T. Dale Stewart, was granted a furlough from July 1943 to January 1944 for the purpose of teaching anatomy to Army and Navy medical students at Washington University School of Medicine, St. Louis, Mo.

On September 5, 1943, the department, the Museum, the Institution, and the science of physical anthropology lost one of its most distinguished students when death came to Dr. Aleš Hrdlička in his seventy-fifth year. Even though he had retired from the active administration of the division of physical anthropology on March 31, 1942, Dr. Hrdlička continued unabated his researches up to within a few days of his death, and only death itself could stop him from his work. He was born in Humpolec, Bohemia, March 29, 1869, and arrived in this country with his parents at the age of 13. In 1903 he assumed charge of the newly created division of physical anthropology in the U. S. National Museum and spent the remaining years of his life in building one of the outstanding collections of human skeletal material. The more than 37,000 specimens in this division can rightfully be

credited to his vigorous and boundless energy. The studies and reports resulting from his world-wide travels, explorations, and laboratory analyses are represented by the more than 350 articles and books which he published. Moreover, the science of physical anthropology in America, to which he devoted the greater part of his life, is largely responsible to this one man. In 1918 he founded the *American Journal of Physical Anthropology*, and he was largely responsible for organizing the American Association of Physical Anthropologists, which was established in 1928. During his world travels he personally examined all the significant specimens relating to the skeletal remains of early man as known up to 1930, and his treatise on the subject made him the outstanding authority. Many societies and educational institutions recognized his untiring zeal and ability by honorary membership. He quite naturally assumed a proprietary interest in the field of physical anthropology, and at times seemed much more formidable than he actually was.

ACCESSIONS

The accessions assigned to the department during the year totaled 61. Only one division, archeology, exceeded the number of accessions received during the previous year. This reduction is no doubt a direct result of the country's effort in winning the war. Nevertheless we were forced to decline several private collections because of lack of space. The 61 accessions included four loans related to special exhibitions installed under the direction of the head curator. These consisted of "Bali: Background to War," "Arts and Crafts of Service People Made in Various U. S. O. Centers," "Emergency Rescue Equipment," and "Belgian Congo at War." Other accessions were assigned as follows: Archeology, 23; ethnology, 19; ceramics, 3; musical instruments, 1; period art and textiles, 9; physical anthropology, 2; totaling 852 specimens. The more important of these are described under the following divisions:

Archeology.—A collection of 115 lots of potsherds and other materials from various Indian sites, many of which are on or near the presumed route of De Soto's expedition of 1539–42 through the southeastern United States, were presented by Dr. John R. Swanton. Other materials include: 29 lots of potsherds from Indian village sites in Nebraska and South Dakota, excavated under the direction of A. T. Hill through the Work Projects Administration and the Nebraska State Historical Society; 65 lots of potsherds, chipped blades, and projectile points from sand-dune hearth areas in Dugway Valley, Tooele County, Utah, presented by Lt. Karl Schmitt, U. S. A.; a Tiahuanacoid pottery vessel from the Lake Titicaca region, Bolivia, donated by Mrs. William C. Davis. Two gold and silver book ends reflecting the Tiahuanacan style of architecture and sculpture, a gift from the Chamber of Commerce in Bolivia to Vice President Henry A. Wallace on the occasion of his visit to La Paz in April 1943, were presented by him to the National Museum.

Ethnology.—One major documented field collection, from the Huichol Indians of northern Jalisco, Mexico, was received as a gift from Col. Harry Stewart. This series of 159 specimens supplements previous collections from that tribe. It was made by Edwin F. Myers during a 3-months' expedition through the entire Huichol

region. Agustín Cosio, an educated Huichol, rendered valuable assistance to Mr. Myers but was later killed by a rebel band. Included are 23 excellent photographs showing the Huichol in their native environment and engaged in their daily activities, hand-woven poncho capes of wool and cotton and other weavings, hunting bows and arrows, objects of personal adornment, basketry, furniture (such as cradles and chairs), toys, charms, votive bowls and fetishes, gourd and pottery utensils, and musical instruments. Another important collection accessioned consisted of 26 large oil paintings of Navaho, Apache, and Pueblo Indians of Arizona and New Mexico by Carl Moon. These came as a gift of the late Florence Rand Lang, who generously financed a project for obtaining "an authentic picture record for present and future students, and all others interested in the American Indian." The paintings were made from color sketches and photographs obtained by Mr. Moon in the field between the years 1903 and 1917. A special showing of the paintings in the foyer of the Natural History Building was favorably received by the public and art critics. Through Charles P. Taft, the estate of Mrs. William Howard Taft, wife of the late President and first Civil Governor of the Philippine Islands, a collection of excellent examples of Moro and Indonesian brasses, which had been presented to Mr. and Mrs. Taft on various occasions, was given to the Museum. Included also is an excellent example of Philippine metal work in the form of a vase beautifully chased, decorated in relief, and inscribed "Al Honorable Gobernador Civil de Filipinas Mr. Wm. H. Taft en Recuerdo del Sangdugong Paiiagunip—Pedro A. Paterno. Manila 27 de Agosto de 1902." A collection of Chinese and Korean bronze mirrors presented by J. Morgan Clements is particularly noteworthy because of certain outstanding specimens. A Korean mirror included in the accession is identical in design and inscribed characters with a mirror in the Prince Yi Household Museum, Seoul, Korea. It is there identified as being of the Koryo period (A. D. 918–1391). The inscription reads *huang p'ei ch'ang t'ien*, or, in English, "the brilliant vast resplendent heavens." Included also was an example of Chinese knife money known as *ming tao*, the provenience of which is probably the Chao State, now a part of modern Shansi, Hopei, and Inner Mongolia. The coin may be classified as of the late Chou period, fourth–third century B. C.

Important accessions assigned to the section of ceramics consisted of a sugar bowl of French silver luster, originally obtained by Captains Lawrence and Tracy, of Steuben, Maine, coowners of a coastal schooner, from a French frigate off Boston Harbor during the latter years of the French and Indian war and presented by George V. Blue, a lineal descendant of Captain Tracy. Three vases and two bowls of Hollywood ware were received from the Santa Monica pottery of the California Art Products, Inc.

The section of musical instruments accessioned a B-flat clarinet made about 1870 by C. H. Eisenbrant, of Baltimore. This instrument, of rosewood, with 7 finger holes and 15 silver keys jeweled with brilliants, and inlaid with filigree silver, came as a gift from Miss Alice I. Siddall.

To the section of period art and textiles was transferred custody of the 95 objects of colonial American house furnishings on exhibition in the colonial room, off the ground floor foyer of the Natural History

Building. These specimens were collected and presented to the Museum by Mrs. Gertrude D. Webster in 1924. The room, including the wall paneling of American pine and the miscellaneous furnishings, has been recently reconditioned. A sixteenth-century Spanish colonial vargueno cabinet desk made of soft wood and veneered with a chocolate-colored walnut or mahogany was presented by Mrs. Graham Ker. Through a bequest from Miss Rebecca E. Everly a hardanger scarf and two doilies embroidered with butterflies, roses, and carnations, and edged with Battenburg lace, were received. Kate Session Marsh bequeathed 20 specimens of miscellaneous antique American and European laces, silver, and other objects of minor period art. Important specimens in the latter bequest are a cake basket of openwork silver, made by William Plummer, London, 1764–65; a chocolate pot of repoussé silver, made by Alice and George Burrows, London, 1816–17; and an icon of the Virgin and Christ Child, made of gold-washed silver, enamel, and pearls, bearing the town mark of Tule, Russia, year 1885.

INSTALLATION AND PRESERVATION OF COLLECTIONS

During the year six temporary exhibitions were installed in the foyer of the Natural History Building under the direction of the head curator, assisted by the other divisions in the department, especially Mr. Krieger and his staff in ethnology, and by the office of the superintendent. During July and August 1943 the Museum's anthropological specimens from the Pacific area extending from the Aleutian Islands through Micronesia and the Melanesian Islands were exhibited in the ten alcoves of the foyer. Of particularly timely interest were those illustrating island cultures of the Marshalls, Solomons (especially Guadalcanal), and Tarawa in the Gilbert Islands. In the Aleutian group emphasis was placed on the extensive archeological and ethnological material from the Island of Attu, from which the native Aleuts were removed or exterminated by the Japs. From October 13 to November 1, 1943, a special exhibition was installed entitled "Bali: Background to War." This exhibit, prepared by the Museum of Modern Art of New York City, has served as a visual aid for the regional training programs of the armed services. It displayed the use of Balinese carvings, paintings, and shadow-play puppets to illustrate the psychology of the natives on the Island of Bali. The exhibition was derived from the 2,000 native works of art and 30,000 photographs collected by the Bateson-Mead Anthropological Expedition. Early in January 1944 arrangements were made to display "Emergency Rescue Equipment" in a special section at the south end of the foyer. Final installation was made in March. Owing to the unusual interest to visitors, this special exhibition remained on view at the close of the fiscal year. It consists of such objects as balsa and inflated life rafts, sun still for purifying salt water, food bombs and their contents, various types of food rations, life preservers, signaling devices consisting of smoke bombs, water dyes, flags, and the emergency signaling mirror, fishing kits, light-weight exposure suit, and photographs illustrating the application of some of this equipment, as well as literature describing the use of the objects under a variety of conditions. The visitors' reactions to the display differ: Parents and relatives of persons in the armed forces are interested to see at firsthand

the precautions taken to prevent loss of life under emergency conditions; military visitors who have had some experience in the use of some of the equipment may either describe some of their narrow escapes or ignore the exhibit because it brings back memories of hardships. The objects were lent to the Institution originally by the Emergency Rescue Equipment Section of the Coordinator of Research and Development, U. S. Navy, later changed to Air Sea Rescue Agency, U. S. Coast Guard.

In January of this year a portion of the foyer was used to display arts and crafts made by Service people in various U. S. O. centers throughout the country. An interesting exhibition of paintings by Carl Moon was placed on display at various intervals from March to June 1944. These were developed from colored sketches made by the artist between the years 1903–1917, and depict various episodes in the daily life of the Navaho, Apache, and Pueblo Indians against a background of home life within the mountains and deserts of the American Southwest. Under the auspices of the Belgian Information Center the department supervised the installation of enlarged photographs illustrating the "Belgian Congo at War." These unusual pictures were made by André Cauvin, who spent a year in the Congo making a photographic record of the transition from a chaotic past into a new structure of contemporary cities and modern forms of armed warfare.

When the supervision of the colonial room was assigned to the department, considerable time was given to the cleaning of all specimens. The handsome wall paneling was cleaned and waxed, the floor painted, and black draperies hung from the top of the Museum walls in order to concentrate the attention of the visitor on the furnishings within the paneled room.

Archeology.—During the year several minor additions were made to the exhibits, but no major changes. The Museum-Gates collections of 1901 and 1905, principally from ceremonial caves in Arizona and New Mexico, were reexamined in preparation for revised exhibits. Several hundred specimens previously removed from exhibit were sorted and returned to their proper place in the study collections. The reference library for Old World archeology was placed in order, and its index cards were revised; a card index to archeological papers in the various Smithsonian Institution publications is in progress. As an example of the work involved in preparing archeological material for museum use, the under scientific helper devoted practically one entire man-year to marking pottery fragments and stone artifacts collected at Tres Zapotes, Mexico, by the Smithsonian Institution–National Geographic Society Expedition.

The death of Dr. A. Hrdlička on September 5, 1943, interrupted his review of the 12 collections he brought back from Alaska between 1926 and 1938.

Ethnology.—All current accessions have been cleaned, fumigated, classified, cataloged, and placed either on display or in classified study series. It has become more apparent during the present war emergency than was evident in normal years that an ethnological specimen may on occasion be found extremely useful to investigators. This observation pertains particularly to specimens originating outside the North American Continent. The staff has, therefore, made every possible effort to improve the classified study series from the Pacific

areas, from Indonesia, and from the Asiatic mainland. In this effort the laboratory of the department of anthropology has been of appreciable assistance, particularly in the cleaning, restoration, and repair of specimens from those areas so that they have been made available for purposes of study. Specimens collected 100 years ago by the U. S. Exploring Expedition from island peoples of the Pacific, as well as the many unique specimens from Indian tribes of the western plains collected by the U. S. Army between 1870–1880, were classified and housed in 45 standard and in 10 specially built cases by the senior scientific aide, Robert A. Elder, Jr., who devoted most of the past year in classifying, repairing, and fumigating these collections. The Museum's fumatorium has been in almost constant use by the division in connection with this work, wherein the division has received the active cooperation of the superintendent's office through the detail of laborers in the cleaning and moving of specimens. Ethnological collections long on exhibition in the displays of Korean, Chinese, Tibetan, and West Africa ethnology have been removed temporarily for fumigation. As indicated in the earlier part of this section, the staff in ethnology assisted in the preparation and installation of temporary exhibitions in the foyer of the Natural History Building.

Physical anthropology.—Because of the death of Dr. Hrdlička, the 6-months' absence of the curator, Dr. T. Dale Stewart, and the military furlough of the associate curator, very few changes in the public exhibitions were made during the fiscal year. After the curator's return from Washington University School of Medicine, St. Louis, Mo., plans were made and carried out for the complete reorganization and redecoration of the division offices and laboratory. While these changes were in progress the divisional work that could be carried on was limited.

The material exhibited in the offices, laboratory, and third floor halls of the division was removed and rearranged in the course of reorganization. One exhibition case retained in the library section of the main office has been filled with memorabilia pertaining to Dr. Hrdlička. Two other exhibition cases in the adjoining offices were being filled at the close of the year with exhibits showing age changes in different parts of the human skeleton. Material of this nature is frequently needed for reference, especially in connection with identification work for the Federal Bureau of Investigation, and is difficult to locate in the general collections. These two cases will also serve as experimental cases for testing out new ideas for exhibitions.

Throughout the year the under scientific helper, Riley E. Mangum, was engaged in rearranging and relabeling the division collections. Within each geographical or tribal group the specimens are being arranged serially by catalog number, and all scattered bones brought together so as to make the individual skeleton the storage unit.

Anthropological laboratory.—The chief preparator, Andreas J. Andrews, supervised the modeling of a composite bust of an average young man, which was lent to the Reconstruction and Development Office, Office of the Quartermaster General, U. S. Army. A life-size model in natural color of head and shoulders of a young man was made, as a loan, for the Motion Picture Photographic Division, Navy Department. A portrait bust of the late Dr. Aleš Hrdlička was modeled. A death mask of Dr. Hrdlička was made for the Czechoslovakian Embassy, the piece-mold for which was retained in

the laboratory. The entire colonial-room exhibit was cleaned and the necessary repairs were made, including 50 new identification numbers. A life-size mannikin, two water-color illustrations, and several specimen supports were prepared for the special exhibition, "Emergency Rescue Equipment."

For the division of archeology several pieces of Mexican pottery and sculpture were repaired and restored. For the division of ethnology 90 pieces of American Indian pottery and a cooking pot from New Guinea were repaired and restored. Ten 5-inch lettered labels were made for the exhibition entitled "Specimens from the Various Islands in the Pacific." A Spanish chest from the year 1600, a 4-foot Chinese statue of Buddha, a large Chinese statue carved from wood, and several additional woodcarvings were repaired and restored. Three costumed life-size figures were repaired and cleaned. Repairs and treatment were given to 57 shields from Borneo, New Guinea, and New Zealand, 21 shields from Africa, two shark-tooth lined swords from the Marshall Islands, a wooden paddle from the Solomons, as well as miscellaneous baskets, blowguns, spears, bows, and harpoons from various primitive peoples. Repairs were made on the Zuñi Indian group, the Cocopa Indian family group, and the John Smith group.

The heroic statue of Alexander Agassiz was assembled, repaired, and given a green bronze patina, and the original model for the Statue of Liberty, by Frédéric Auguste Bartholdi, was repaired for the National Collection of Fine Arts. A piece-mold and two bronzed casts were made of a bronze Chinese Tang mirror for the Freer Gallery of Art. Two duplicates in natural color of a Mayeria Maga were made for the department of biology. Adjustments on a figure in the Period Costume Exhibit were made for the division of history.

Sr. Gregorio Hernández de Alba, of the Museo Arqueológico de Colombia, was instructed in the technique of restoring and mending pottery. Sr. Anibal Buitron, from Quito, Ecuador, was given instruction in the technique of restoring and mending pottery, mold-making, and the process of reproducing foliage in wax.

All sculpture throughout the building was kept in repair.

INVESTIGATION AND RESEARCH

To furnish the desired anthropological information requested by the various war agencies, the Ethnogeographic Board, and the Federal Bureau of Investigation has required considerable research on the part of the staff. Many specimens submitted to the department for identification through normal channels have required many man-hours. In addition, several manuscripts were prepared for publication. An article entitled "Archaeological Explorations in the United States, 1930–1942," by the head curator, was published in Acta Americana.

During the year 43 lots of specimens were assigned to the department for identifications and subsequently returned to the owners. A total of 647 letters were referred to the department requesting anthropological information. In addition, numerous identifications were made and information was supplied to the visitors coming directly to the offices of the various curators.

Archeology.—The curator of archeology, Neil M. Judd, completed three additional chapters of his report describing the material culture resulting from excavations he directed at Pueblo Bonito in Chaco Canyon, N. Mex. Upon his return from a six-months' detail to the War Department, the associate curator, Dr. Waldo R. Wedel, resumed study of the archeological material which he excavated in Kansas during 1939–1940. Dr. Wedel's report "Archeological Investigations in Platte and Clay Counties, Missouri" (with an appendix on "Skeletal Remains" by Dr. T. Dale Stewart), was published during the year as a bulletin of the National Museum.

Sr. Gregorio Hernández de Alba, chief of the Archeological Section, Ministry of Education, Bogotá, Colombia, and Sr. Anibal Buitron, of Quito, Ecuador, graduate student of anthropology and guest of the State Department, spent considerable time working on the archeological collections and acquainting themselves with our museum methods. Thirteen lots of archeological material were received for examination and report and subsequently returned to the senders.

Ethnology.—Through increased assignments in connection with temporary exhibitions and the general supervision of classifying and preserving specimens, little time remained for the curator, H. W. Krieger. Nevertheless his article "Island Peoples of the Western Pacific" was published as No. 16 of the Smithsonian Institution War Background Studies, and progress was made on the preparation of another number for the same series covering the ethnology of the outlying islands of the Japanese Empire, namely, Ryukyu Islands, Formosa, Karafuto, the Kuriles, and Bonin Islands.

Assistance by the division in the research work of outside investigators has been primarily through facilities provided them for examining specimens in the collections, the files of photographs, paintings, manuscripts and other documentary data, books from our library, and the indexed references of filed classified data. The demand by individual correspondents and visitors for photographs from our negative files and for new photographs of specimens is steadily increasing. This involves the assembling of appropriate pictures for selection, as well as of specimens to be photographed, and the identification and captioning of the prints.

Governmental departments and agencies used the division resources continuously throughout the year. Many classes of specimens were examined and sketched. The division library was combed for every scrap of information constructive to the war effort.

The study of ceramics, silver, glass, and pewter is of never-failing interest to the public and involves time and some research on the part of the division staff in collecting data for visitors and compiling information for distribution to interested correspondents. Personal interest in the identification of privately owned collections of laces, embroideries, musical instruments, silver, pottery—in fact, the entire gamut of antiques—survives robustly as a war time hobby. Visitors and correspondents reveal an increasing interest in the care and preservation of treasured antiques and of family heirlooms. This frequently results in requests for advice regarding technical methods of repair and preservation. Inquiries regarding hallmarks on silver, and maker's marks generally, require considerable time in providing answers. It has been observed that during periods of war-loan drives requests for information as to suitable markets for family heirlooms and

antiques markedly increase. The number of requests for available literature on the division's collections reveals a growing public demand that such literature be prepared for distribution as requested.

Twenty-eight written reports were made pertaining to the examination and identification of a total of 108 specimens for private individuals as compared with 18 written reports covering a total of 41 specimens for the preceding year.

Physical anthropology.—During his furlough for teaching at Washington University School of Medicine, St. Louis, Mo., studies were carried on by the curator, Dr. T. Dale Stewart, on age and sex changes in the human skeleton. This was possible because the skeletal collections preserved in the department of anatomy were obtained from the dissecting rooms and therefore were accurately identified. The experience gained in handling this material is proving useful in studying the unidentified specimens in the division. In the course of this work the curator took the opportunity also of studying arthritic changes in the skeleton. The decision to study this subject is explained by earlier observations on this feature in the Eskimo and Indian skeletons in the National Museum. Here again, since arthritis is closely correlated with age, it was hoped that the university's identified material would aid in the interpretation of the condition in the groups where exact age is unknown. In addition to his work at the University, several evenings were given to studying the Indian skeletons excavated in Illinois by Dr. P. F. Titterington, a St. Louis physician. Two cultural horizons are represented by these Indian remains, the Hopewell and the Jersey County bluff focus of the Middle Mississippi. After his return to Washington Dr. Stewart prepared a paper on "Filed Indian Teeth from Illinois," based also on material in the collection of Dr. Titterington.

Up to the time of his death, Dr. Hrdlička continued to analyze his data on the human tibia. The year also saw the publication of the seventh and last part of Dr. Hrdlička's "Catalog of Human Crania in the United States National Museum Collections," this number covering the non-Eskimo people of the Northwest coast, Alaska, and Siberia. This series of catalogs in all presents measurements of more than 7,500 non-White crania and has been described as constituting "one of the most valuable sources of basic anthropometric data in existence."

The curator, Dr. Stewart, furnished a report on a skeleton discovered in Texas by Dr. Cyrus Ray and investigated in situ by Dr. Frank H. H. Roberts, Jr., of the Bureau of American Ethnology. This specimen afforded an opportunity to make a reconstruction of the skull from relatively few fragments. Aided by the Schwarz stereograph possessed by the division, it was possible to approximate the original shape of this skull in a manner that would not otherwise have been possible. On several occasions the curator aided in the identification of skeletal remains brought in by agents of the Federal Bureau of Investigation. In most of these cases the Bureau had received fragments of burnt bone obtained from furnaces or stoves where murder was suspected.

DISTRIBUTION AND EXCHANGE OF SPECIMENS

During the year the department distributed 242 items, including a plaster cast bust in natural color of a young man approximately 20

years of age, to the Motion Picture Division, Photo Science Laboratory, U. S. Naval Air Station; the cast of a Neanderthal child recently discovered in Uzbekistan, Central Asia, loaned to Dr. Franz Weidenreich; gifts to the William T. Hornaday Foundation and the Children's Museum in Washington, together with photographs and transfers to other government bureaus, schools, and colleges for exhibitions and educational purposes.

NUMBER OF SPECIMENS UNDER DEPARTMENT

On June 30, 1944, the department of anthropology was credited with a total of 711,917 cataloged specimens, which represents a net increase of 800. The following summary indicates the distribution of specimens as assigned to the various divisions and sections within the department:

Archeology	479,786
Ethnology	182,748
Ceramics	7,585
Musical instruments	2,414
Period art and textiles	2,254
Physical anthropology	37,130
Total	711,917

DEPARTMENT OF BIOLOGY

(WALDO L. SCHMITT, *Head Curator*)

WITH pardonable pride we may review this department's participation in the present war, both in men and special knowledge or information furnished and in contributions to the scientific, esthetic, and economic life of the Nation.

Dr. Remington Kellogg, curator of mammals, served as chairman of the American delegation to the International Conference on the Regulation of Whaling held in London during January. Also, at the request of the National Research Council, for the Board for the Coordination of Malarial Studies, and in collaboration with Maj. E. A. Goldman of the Fish and Wildlife Service, Dr. Kellogg prepared the first of a series of descriptive accounts of the kinds of monkeys that may carry malarial infections. Dr. Paul Bartsch, curator of mollusks, worked in close cooperation with a special committee of the National Research Council, in preparing a list of known or suspected molluscan intermediate hosts of human parasites. In connection with the preparation of survival manuals, Dr. L. P. Schultz, curator of fishes, and Earl D. Reid, scientific aide, demonstrated to members of the U. S. Navy the use of derris root for securing fish for food in emergencies.

Dr. David H. Johnson, associate curator of mammals, commissioned lieutenant (jg), U. S. N., left in May for special service with a medical unit. S. Dillon Ripley and H. G. Deignan, assistant and associate curators of birds, respectively, were granted military furloughs for special missions. Dr. R. E. Blackwelder, associate curator of insects, also is still on furlough, in work concerned with the war. Dr. J. P. E. Morrison, assistant curator of mollusks, has been on a special detail concerned with work of the war since February. Seven entomological collaborators and specialists from the staff of the Bureau of Entomology and Plant Quanrantine located in the Museum have been serving with the Sanitary Corps of the Army in the Pacific area and on the home front for periods ranging from eight months to two and a half years.

Under the auspices of the Division of Cultural Cooperation of the Department of State, Ellsworth P. Killip, associate curator of plants visited Colombia during April, May, and June for consultations and work in botanical centers in Bogotá and Cali.

All divisions carried as heavy a work load this year as last, furnishing special information on a great variety of subjects and indentifying a constant stream of animals and plants for various units of the armed forces and other agencies concerned both directly and indirectly with the war. Identifications and information centered around organisms involved in the transmission of disease, their distribution over the world, their life histories, their habits, and frequently the remedial measures that should be taken to overcome them. Other

inquiries concerned poisonous or otherwise noxious animals and plants, emergency foods, sources of new or increased food supplies, and strategic and substitute raw materials of plant or animal nature needed in prosecuting the war or sustaining civilian economy.

All divisions in the department contributed to the Navy's booklet "Survival on Land and Sea," published in December, to "A Field Collector's Manual in Natural History," recently issued by the Smithsonian, and to the preparation of nine mimeographed leaflets for distribution to correspondents inquiring about the animal and plant life of the Southwest Pacific. Austin H. Clark, curator of echinoderms, published "Iceland and Greenland," the fifteenth of the Smithsonian's War Background Studies, and in collaboration with Dr. E. H. Walker, assistant curator of plants, prepared material for the biological section of another volume of this series dealing with the Aleutian Islands.

While on vacation in Illinois, Dr. R. I. Sailer, of the U. S. Bureau of Entomology and Plant Quarantine, working at the Museum, collected more than 2,000 specimens of Hemiptera, since added to the national collections. About 500 Diptera collected by Dr. M. T. James of the same Bureau during a vacation spent in Colorado also were added to our collections. Other specialists of the Bureau located at the Museum accomplished considerable collecting in the vicinity of Washington, D. C., assembling a surprisingly large amount of material, principally Ichneumonidae, Aleyrodidae, and miscellaneous Heteroptera and Diptera. In addition to the Aleyrodidae taken in the field, other sizable collections of this family were obtained from the National Herbarium. Certain groups of preserved plants examined for specimens of Coccidae and Aleyrodidae in connection with an African problem yielded more species of Aleyrodidae than had been known previously from all Africa.

ACCESSIONS

The 760 accessions recorded for the year exceeded the previous year's total by 56. The number of specimens received was also greater, totaling 229,546 specimens in all. One accession, the Albert Mann Diatom Collection, received as a gift from the Carnegie Institution of Washington, alone approximated 18,000 specimens of various kinds, chiefly mounted slides of diatoms. In combination with the existing national collections, this gives the National Museum one of the world's leading diatom collections. This and other important accessions are listed below by divisions.

Mammals.—The largest single collection of mammals received in the last quarter of a century consisted of a large series, about 2,400 specimens, of both small and large mammals from the departments of Atlantico, Magdalena, Bolívar, and Norte de Santander, Colombia, collected by Philip Hershkovitz, while holding the Walter Rathbone Bacon Traveling Scholarship of the Smithsonian Institution. Other smaller but also important accessions include the following: A beaked whale fetus measuring about 7 feet in length, the largest in the national collections, taken at Cape Hatteras, N. C., and presented by the North Carolina State Museum; three transfers from the Navy Medical School consisting of 24 mammals from Georgia and Florida, 98 rats and mice, and 2 mongooses from the Pacific, of interest because they come from areas from which the Museum has practically no

material; a skin and skull of a whitetailed deer from the Virgin Islands from Harry A. Beatty; 17 mice, 1 mole, and 1 muskrat from Grosse Isle, St. Lawrence River, Quebec, a hitherto unrepresented locality, from Capt. James A. Baker; 76 small mammals from Bolivia, of which 42 were collected by Dr. Raymond Gilmore and 34 were forwarded by Dr. Roberto Cors Medina, Servicio Nacional Antipestoso, La Paz, Bolivia; 20 mammals from the National Zoological Park; 624 mammals from various North American localities from the Fish and Wildlife Service, comprising the second largest accession of the year.

Birds.—Aided by the W. L. Abbott fund of the Smithsonian Institution, M. A. Carriker, Jr., added 3,281 specimens from Colombia to the Neotropical bird collection, giving the Museum a reasonably complete representation of the bird life of northern Colombia. From Brother Nicéforo María, of Bogotá, gifts totaling 85 birds were received from parts of Colombia not visited by Carriker. Other additions include the following: From the American Museum of Natural History 20 birds hitherto unrepresented in the study series, including a genus, *Drepanoptila*, new to the collection; from Lt. E. W. Pfeiffer, U. S. Marine Corps, 37 birds, including some forms new to the collections, from Recife, Brazil; from Pvt. Hugh Birckhead, U. S. A., 13 specimens from North Africa; from W. H. Phelps, of Caracas, Venezuela, two skins of a Venezuelan warbler, *Myioborus miniatus ballux*, of which one, the type, is placed on deposit. By exchange there came two skins of a Texas red-shouldered hawk, *Buteo lineatus texanus*, new to the collection, from the Museum of the Louisiana State University, and from the Departamento de Zoologica, São Paulo, Brazil, a specimen of the genus *Coryphaspiza*, also new to the collection. Sixty-eight skeletons, nine skins, and three alcoholic specimens were received as a transfer from the National Zoological Park.

Reptiles and amphibians.—As a result of exchanges undertaken with other institutions, a number of unrepresented, or poorly represented, species of amphibians have been added to the collections as follows: From the Museum of Zoology, University of Michigan, paratypes of 13 frogs and specimens of 125 frogs and 24 salamanders; from the Museum of Comparative Zoology, Harvard University, 13 paratypes and 50 other specimens of frogs. As gifts there came 356 salamanders, frogs, lizards, and snakes from the Great Smoky Mountain National Park from Lt. (jg) Willis King; about 400 specimens of frogs from Jamaica, lizards and frogs from Honduras, from Dr. W. Gardner Lynn; about 60 turtles, lizards, snakes, and frogs from Philip Hershkovitz, incumbent under the Walter Rathbone Bacon Traveling Scholarship; 28 frogs from the New York Zoological Park through Dr. William Beebe; and 69 turtles from the Tennessee Valley Authority through Dr. Clarence M. Tarzwell.

Fishes.—Exchanges consummated during the year brought much valuable ichthyological material to the Museum, most of it new to the collections, as follows: From the Museum of Comparative Zoology, 321 cotypes; from the American Museum of Natural History, four paratypes of *Characidium marshi* Breder; from the Chicago Natural History Museum, a paratype of *Gobiesox paradiseus* Herre, besides 14 other specimens of Venezuelan fishes. Other species new to the collections received as gifts include a cotype of *Geophagus magdalenae* Brind, from A. J. Deering; from Dr. William Beebe, holotypes of the

Venezuelan fishes *Hypopomus beebei* Schultz and *Corymbophanes venezuelae* Schultz; from Hugh H. Iltis, *Priacanthus bonariensis* and *Sphaeroides pachygaster*, together with 17 other well-known species from off Cape Henry, Va.; and from the National Geographic Society, collected by Luis Marden, three large specimens of the fresh-water shark *Eulamia nicaraguensis* from Lake Nicaragua, the type locality, new to the collections, and 173 other specimens mostly from Lakes Nicaragua and Managua and from El Salvador.

Insects.—The vital and significant role played by entomology and entomologists in the war is reflected in the host of mosquitoes and mosquito larvae that have been received by the Museum from the Sanitary and Medical Corps of the armed forces, about 10,000 specimens all told, comprising a collection of these forms from the south and southwest Pacific probably not equaled anywhere else in the world. Other important accessions of insects include the following: More than 3,000 specimens of bees from all parts of the world, including some type material, presented by Dr. T. D. A. Cockerell; nearly 4,000 butterflies of the family Lycaenidae, including 37 holotypes and 160 allotypes and paratypes, a gift from W. D. Field; 2,000 Hemiptera, including 3 holotypes, from Dr. S. B. Fracker; comprehensive collections, chiefly insects collected by the donor, Maj. D. Elmo Hardy, in India; 57,000 miscellaneous insects selected by workers of the Bureau of Entomology and Plant Quarantine from material received for identification during the year.

Marine invertebrates.—Gifts of type material were received in seven of the year's accessions and include: Types of two new species of crayfish from Dr. Horton H. Hobbs; the type of a new species of rhizocephalid from Dr. E. G. Reinhard; holotypes and allotypes of 10 new species of crayfishes from Dr. Rendell Rhoades; holotypes, allotypes, and paratypes of six new species of ostracods from Dr. C. Clayton Hoff; five slides of Foraminifera carrying paratypes of a new species from David Nicol; and the type and paratypes of a new polyclad worm described by Dr. Libbie Hyman, from Dr. C. H. Edmondson. A notable northward extension of the range of a tropical west American marine crab is represented by a specimen of *Euphylax dovii* taken in Monterey Bay and presented to the Museum by the Hopkins Marine Station through Dr. Rolf L. Bolin. Especially worthy of note is the fact that during the last year 6 accessions, totaling 2,380 specimens, collected by men in the armed services have been donated by them to the national collections. For these, in many cases rare, specimens the Museum is indebted to the following: Maj. D. Elmo Hardy, San. C., U. S. A., India; Ensign Donald R. Johnson, Malaria Control, U. S. N. R., North Carolina; Sgt. Joel Martin, U. S. A., South Pacific; Sgt. Milo W. Williams, U. S. A., Mississippi; Sgt. James E. Hadley, U. S. A., New Guinea.

Mollusks.—The Museum's collection of Mexican land shells was materially enhanced by three gifts, totaling 1,490 specimens, received from Miss Marie E. Bourgeois. Other Mexican material collected by Dr. G. A. Cooper, of the department of geology, includes 1,145 shells and 67 brachiopods from Sinaloa, Sonora, and Veracruz. Dr. E. A. Andrews, who had built up the largest known collection of Jamaican representatives of the family Neritidae, presented the entire 51,000 specimens and accompanying 850 microscope slides to the Museum. Other notable accessions included 1,200 Trinidad shells from Samuel

P. Archino; 31 specimens, representing 25 species, from Dr. R. G. Fennah, entomologist to the Agricultural Advisory Department of Trinidad; 84 Colombian mollusks donated by Brother Daniel, of Medellín; 150 marine shells from Mississippi, collected by Sgt. Milo W. Williams; and 238 land and fresh-water mollusks from the U. S. Public Health Service, through Dr. Eloise B. Cram.

Helminths.—Valuable accessions in the form of gifts of type material came to the helminthological collections as follows: From Dr. Eduardo Caballero y C., three cotypes of *Ochoterenella digiticauda* and a cotype of *Choledocystus intermedius;* from Lt. (jg) N. Z. Frayne, D. C., the type specimen of *Choricotyle reynoldsi;* from the Illinois State Academy of Science, types of *Diphyllobothrium oblongatum* and *D. crenatum;* from Dr. Harold W. Manter, three slides containing four specimens, including type and paratype of *Hexostoma macranthum* and type of *Cyclocotyla hysteroncha;* from Carl Cecil Riguey, nine slides of cotypes of *Raillietina centuri.*

Corals.—Twenty recent corals, collected by Dr. Hollis Hedberg, were presented by Dr. John W. Wells, and 12 from Trinidad by Samuel P. Archino.

Echinoderms.—Among the 89 echinoderms accessioned during the year were six specimens of an undescribed species from Hawaii received from Dr. Charles A. Ely, six paratypes of new ophiurans described by Dr. Hubert Lyman Clark, and two interesting abnormal starfish from Dr. Walter K. Fisher.

Plants.—Though the actual number of botanical accessions was slightly less than last year, the 36,240 plants received included 2,000 more than the year previous. Largest of the more important accessions was the Chickering Herbarium of approximately 10,550 specimens, presented by the Columbia Institution for the Deaf (Gallaudet College). This herbarium, formed by the late John White Chickering, Jr., mostly during the long period of his association with the college, was acquired some time after his retirement from teaching in 1900. It is a valuable addition to the National Herbarium, since it includes much historically important material belonging to collections previously not at all or scantily represented; for example, the early collections of E. L. Greene in California, New Mexico, and Colorado, of J. F. Joor in Texas and Louisiana, and of T. J. Hale in Wisconsin. The collection is of special local interest also as containing Professor Chickering's own material from the District of Columbia, of which a great deal was collected in plant habitats now destroyed. The larger part of the herbarium consists of mounted specimens. Other noteworthy gifts include 3,279 specimens from Venezuela, coming largely from little-known regions, presented by Prof. Henry Pittier; 2,052 specimens of Venezuelan plants collected for the Museum by the associate curator, E. P. Killip; about 2,500 specimens of bamboos from tropical America, including an unusually good representation of vegetative structures important in the field identification of the bamboos, collected for the Museum by Dr. F. A. McClure, research associate in botany; 1,421 specimens from Colombia, collected by the donor, Oscar L. Haught; 539 specimens of grasses, mostly from Australia, presented by Mrs. Agnes Chase, custodian of grasses; about 1,000 specimens from Virginia and West Virginia, presented by H. A. Allard; 261 specimens from the little explored west-central mountain region of Puerto Rico, containing a number of ferns hitherto not

known from the Island, presented by F. H. Sargent; 315 specimens from Hawaii and the western United States, presented by Otto Degener; 538 specimens from Maryland, presented by E. C. Leonard, assistant curator; 430 specimens, mostly from Brazil and Panamá, presented by E. P. Killip, associate curator.

The Albert Mann Diatom Collection, consisting of approximately 8,000 slides of mounted specimens, in excess of 10,000 samples of crude diatom material, and over 200 negatives and 300 lantern slides, was formally accessioned on March 21 as a gift from the Carnegie Institution of Washington. The Albert Mann Collection is the most important single addition ever made to the nation's collection of diatoms, about doubling it in size and so extending its scope that it takes its place among the world's foremost collections of these organisms.

INSTALLATION AND PRESERVATION OF COLLECTIONS

In the course of the continuing task of cleaning and renovating the biological specimens on public display, occasion was taken to rearrange and otherwise improve the exhibition series of European, Australasian, Asiatic, and African mammals. By removing duplicates and deteriorated specimens, mounting all arboreal animals on suitable limbs, removing all old wooden bases, grouping the animals in geographical sequence, sanding the floors of all cases, and, finally, washing all glass inside and out, the exhibits in the south hall, except for the labels, appear as newly installed. A lack of uniformity in style in the labels is to be remedied at the first opportunity. The Museum's exhibit of hummingbirds is being completely overhauled. New specimens are replacing old faded ones, and fluorescent lighting is being installed. Two large, handsomely mounted sharks, donated by Michael Lerner, were placed on exhibit in the fish hall on the second floor. A few specimens, such as the Neptune's cup sponge for which many visitors inquire, were added to the invertebrate exhibit.

Although any general overhauling or reconstitution of the departmental exhibits must await the end of the war, the curators in a series of discussions participated in by various members of their staffs and the chief taxidermist have drawn plans designed to make the most effective use of available space and existing exhibits. At the same time, models were constructed to present graphically the subjects chosen for visual demonstration. The proposed vertebrate exhibits were suggested by Dr. Wetmore, Dr. Herbert Friedmann, A. H. Clark, Dr. Doris Cochran, and Walter A. Weber, and modeled by Mr. Weber, Mr. Clark, and Dr. Cochran; the proposed invertebrate exhibits were planned and modeled by Mr. Clark and Dr. E. A. Chapin. Descriptive matter accompanying the models was prepared by Dr. Friedmann and Mr. Clark.

Mammals.—In common with other divisions of the department, one of the most pressing problems is shortage of storage space. This condition hinders the orderly expansion of the study collections, adds to the burden of their care and study, and retards identification of new material. All the material is properly indexed but in a number of cases difficult of access. No special work was done on the alcoholic collections except the routine filling of jars and tanks with alcohol as necessary.

Birds.—The rearrangement, reidentification, and labeling of the study series of bird skins were continued, the following families being covered in part or whole: Eurylaemidae, Dendrocolaptidae, Furnariidae, Conopophagidae, Rhinocryptidae, Cotingidae, Pipridae, Tyrannidae, Oxyruncidae, Phytotomidae, Pittidae, Xenicidae, Philepittidae, Menuridae, Atrichornithidae, Alaudidae, Hirundinidae, Campephagidae, Dicruridae, Oriolidae, Irenidae, Tetraonidae, Phasianidae, and Cracidae, comprising 42 quarter-unit cases and 24 half-unit cases. During the first half of the year the associate curator, H. G. Deignan, spent considerable time in checking over the collection for possible types and in correcting labels on specimens with insufficient or misleading data. The evacuated material has been checked, poisoned, and found to be in excellent condition. All material received during the year has been identified, at least to species, for catalog purposes. Substantial additions were made to the card catalog of published colored pictures of birds. Under the supervision of the curator, Dr. E. M. Hasbrouck, carrying on volunteer work in the division, and the scientific aide, J. S. Webb, began a complete rechecking of the collection of the birds of North America, listing especially all gaps in the series, not only of forms unrepresented, but of plumages (sex, age, and season) needed to round out the collection, and of forms of which no topotypical material was available. This information will facilitate arranging exchanges and suggesting other ways of filling these gaps in order to increase the usefulness of the collection. The study collection of the Fish and Wildlife Service was extensively rearranged and expanded by its curator, Dr. J. W. Aldrich.

Reptiles and amphibians.—The dried turtle collection, which was returned to the division following the death of Dr. Stejneger, has been entirely rearranged so that all specimens may be readily located. The card catalog being made of this collection is about half completed. The processing and cataloging of all incoming material are up to date. The backlog of unidentified material in the collection is being steadily reduced to an almost negligible figure. Exchanges involving duplicate specimens have not greatly relieved the overcrowded condition of the alcoholic stack, as the desired material received in return required about as much space as was occupied by the distributed duplicates. Four half days a month of the time of a laborer are devoted to the care of the evacuated alcoholic types of the department. These collections continue in first-class condition.

Fishes.—The alcoholic storage in the division of fishes is about taxed to capacity, with the result that the 45,000 specimens transferred from the Fish and Wildlife Service last year are still on shelves in the offices. By rearranging shelves and family jars in the stack, enough space was gained to care for current accessions and for the anchovies worked up by Dr. Hildebrand. The 12 families of South American catfishes and the family Characinidae were also rearranged to accommodate the intercalation of the 18,262 Venezuelan fishes worked up by the curator. The identification of unworked fishes accumulated from past years is being energetically continued. A careful estimate shows about 400,000 fishes either uncataloged and therefore unavailable for comparison or as yet unincorporated in the classified series. Except for some large accessions, the general routine of identification, counting, cataloging, bottling, labeling, and filing and refiling of jars is current. Wooden barrels have been found to be unsatisfactory for

holding fish and are being replaced with other containers as they become available. The present status of the collection is satisfactory except for the crowded condition of the stack.

Insects.—Of the groups of Scarabaeidae and Coccinellidae in direct charge of the curator all the material of the genus *Pinotus*, family Scarabaeidae, was reidentified and placed in systematic order. The addition of a new double room on the second floor greatly increased the working facilities in the section of Hemiptera, making it possible to rearrange the cutworm moths, family Phalaenidae, in the space formerly occupied by the Hemiptera. Because of the heavy load of service work and lack of personnel, it has been impossible, for the present at least, to continue with the segregation of holotypes begun in 1942. Work on the Lepidoptera was discontinued before the end of the last fiscal year, and, although resumed early in 1944, it was again dropped when Mr. Field was inducted into the Army in December.

The Nearctic collections of Orthoptera are on the whole well arranged and identified, but the exotic material is largely unstudied. During the year, however, both the Nearctic and exotic Blattidae, Mantidae, and Phasmatidae were put in good condition. The Dermaptera were studied and completely rearranged. All the order Embioptera was recently identified by Capt. E. S. Ross. The working collections of Nearctic Odonata, Plecoptera, Megaloptera, Mecoptera, and Neuroptera are moderately well named and for the most part reasonably well arranged. The Trichoptera and exotic Odonata are mostly unworked, the latter being unavailable for study. Parts of the alcoholic collections were gone over during the year and put in good order.

The entire collection of coleopterous larvae, which is probably the best of its kind anywhere, is in excellent condition and on the whole very well arranged. Dr. A. G. Böving redetermined and rearranged all the material belonging to the Anobiidae, and Dr. W. H. Anderson expanded, relabeled, and put the scarabaeid larvae in good working order and incorporated some large lots of identified Scolytidae (weevils) in the regular reference collections. Of the adult Coleoptera W. S. Fisher rearranged the Bostrichidae of the world and accomplished a much-needed reorganization of the Anobiidae, Languriidae, Colydiidae and Melasidae. H. S. Barber rearranged several minor groups of Chrysomelidae and some portions of the Dermestidae, while L. L. Buchanan rearranged parts of many genera of Curculionidae. Dr. J. M. Valentine completely rearranged the West Indian Carabidae, as well as several larger genera of Elateridae. On the whole, the collections of Coleoptera are in fairly good condition. Many parts, however, are badly overcrowded and contain much poorly identified material which needs to be reviewed and redetermined. There are also very many schmitt boxes of pinned beetles, partly identified but mostly unnamed, remaining to be transferred to Museum trays.

Before his induction into the Army, W. D. Field completed the incorporation and rearrangement of the North American butterfly collections into one unit, a difficult and praiseworthy accomplishment. Work that Mr. Field had initiated on the Phalaenidae has now been taken up by H. M. Tietz, temporarily appointed for the purpose. Before his death August Busck completed the incorporation of the Engelhardt collection of Aegeriidae in the

national collection, which was rearranged at the same time to conform with Engelhardt's revision of the family. The adult and the slide collections of the Oecophoridae were arranged by Carl Heinrich to conform with Clarke's recently published revision of the group. Mr. Heinrich and Mr. Capps began a separate collection of inflated larvae by withdrawing such specimens from the adult collections. This work was completed for the large family Phalaenidae, considerably facilitating larval identifications in that group. Segregating the larvae has saved the adult collections from unnecessary handling. The principal additions to the Lepidoptera collections have been in identified larvae.

Austin H. Clark, curator of echinoderms, received during the year some hundreds of butterflies from New Guinea, the Solomon Islands, the West Indies, and northern South America, collected by officers and enlisted men in the Army and Navy. A considerable number have already been identified and placed in the collection. The specimens are turned over to the Museum as gifts from the collectors.

Moving the collections of Hemiptera to new quarters on the second floor provided needed room and more comfortable working space. Although this larger room seems to be rather well filled, space remains for considerable expansion. In spite of adding some of the identification work in the Homoptera to his already heavy workload, Dr. R. I. Sailer made appreciable improvements in the collection of Heteroptera, labeling and arranging it in as uniform a manner as possible considering the diverse character of the material. The subfamily Triatominae, of considerable medical importance, was given special attention, the entire collection being rearranged and all undetermined material identified. The same treatment was accorded the family Cimicidae and the genus *Solubea* of the family Pentatomidae following the completion of Dr. Sailer's revision of this genus. All doubtful Nearctic representatives of the family Miridae in the regular collections, some 500 specimens, were checked by Dr. Sailer and the identifications verified by Prof. H. H. Knight. The New World Tingidae were largely rearranged, as was also the greater part of the subfamily Corimelaeninae. The Old World Cydninae, previously mostly unidentified and in old cork-bottomed drawers, were checked and transferred to trays. The Nearctic collection of this group was arranged in large part; and more than 1,500 specimens of the genus *Euschistus* of the family Pentatomidae were reidentified and arranged. The entire Fracker collection of about 2,300 specimens, 700 specimens of the McAtee collection, and approximately 3,000 specimens from miscellaneous sources were incorporated in the regular collection. The large quantity of unincorporated material, especially of the McAtee, Baker, and Ball collections, constitutes the principal curatorial task remaining in the Heteroptera. The work that remains to be done in incorporating the leafhoppers and related groups, including the extensive and valuable Ball collection, is enormous. The aphid collection was so well reorganized last year that it has required little attention this year except for the incorporation of new material. The collection is well named and otherwise in very good condition, and almost certainly is the largest and best collection of aphids anywhere in the world. Further improvements have been made in the aleyrodid collections by Louise M. Russell, who remounted unsatisfactory old type material as opportunity offered. Approximately

100 lots of unmounted specimens were transferred from boxes and miscellaneous containers to the envelope collection of duplicate unmounted material, and about 250 slides were rearranged in accordance with recent revisionary studies. All currently received material of the Aleyrodidae, Psyllidae, and Chermidae has been incorporated. The improvement in the condition of these collections during the past three years since Miss Russell has had charge of them is most encouraging.

The transfer of the Diptera collections to the second floor was of great help in the better organization of these collections as a whole. During the past year the principal emphasis naturally was on the collections of blood-sucking flies, especially the mosquitoes. As a result of Army and Navy directives, 22 shipments of mosquitoes were received from the Army and 29 from the Navy during the year from foreign countries, including Algeria, Liberia, Gold Coast, Ascension Island, French Morocco, Brazil, Honduras, Nicaragua, Panama, China, New Hebrides, Solomon Islands, Samoa, Fiji, and New Guinea. In addition to the material received through the Army Medical Museum and the National Naval Medical Center, some Army and Navy officers have submitted collections involving many thousands of specimens directly to Dr. Alan Stone. As such enormous collections cannot be put into proper condition and incorporated promptly with the limited staff available, the Bureau of Entomology and Plant Quarantine appointed R. E. Nevin to assist Dr. Stone with the preparation and arrangement of this material. Early in the year the large collection of fruit flies comprising the Tephritidae, also contained in Dr. Stone's assignments, was incorporated in the regular series. Current material, as well as the collection of Conopidae identified and returned by Sydney Camras, was incorporated in the muscoid collections. The collections of Muscoidea are in reasonably good order as far as Nearctic material of certain families is concerned, but on some large groups, particularly the Muscidae and Anthomyiidae, a great deal of work still needs to be done. One of the most serious deficiencies is in the Old World material. For most families of Muscoidea the Old World fauna is so inadequately represented that identification work is extremely slow, much of it uncertain.

Apart from the incorporation of currently received material, little was done during the year in the rearrangement of parasitic Hymenoptera. R. A. Cushman, however, reorganized the North American material and part of the exotic collection in the course of his revision of Ophionini. Considerable old Philippine and Australian material in the Ichneumonidae was transferred from schmitt boxes to trays and roughly rearranged. As a result of Mr. Cushman's interest in the classification of larvae, some worth-while additions were made to the collection of immature stages of parasitic Hymenoptera. Of the aculeate Hymenoptera nothing was done with the bees, except that J. C. Crawford handled those requiring immediate attention. The wasps were given some attention by Dr. H. K. Townes, who studied and arranged seven drawers of Philanthini and four drawers of Oxybelini, and also incorporated in the collection part of the large lot of *Polistes* that was reviewed and identified by Lt. Richard Bohart.

The collection of Thysanoptera, though still relatively poor as far as the number of forms represented is concerned, is well organized. Only a small part of a considerable amount of material accumulated

from many sources, both United States and foreign, was mounted, owing to shortage of preparatorial assistance.

The collections of fleas and Anoplura were arranged in accordance with the latest classifications. The slide material of these two orders is in good condition, being very satisfactorily arranged, and nearly all specimens specifically identified. The mite collection, however, is in need of complete overhauling, but this is not possible until more slide storage is available. Some effort will have to be made soon to provide additional storage equipment.

Marine invertebrates.—The study series of marine invertebrates, both dry and alcoholic, is in excellent physical shape, and its arrangement and accessibility are being slowly but gradually improved. This year a considerable portion of our extensive collections of marine and fresh-water plankton was overhauled, relabeled where necessary, and arranged chronologically under collectors, chiefly vessels of the old U. S. Fish Commission and former U. S. Bureau of Fisheries: *Grampus*, *Fish Hawk*, and *Albatross*.

Mollusks.—The division reports material arrearages in the preparation of specimens for intercalation in the study series, due partly to the prolonged absence of Dr. J. P. E. Morrison on special detail and partly to the fact that the great volume of work of this sort is more than the present staff can cope with unaided. There is enough of this work awaiting attention to warrant the full-time employment of a preparator for several years.

Helminths, corals, echinoderms.—These collections continue in good shape. The helminths at present are being cared for at the research station at Beltsville, Md. The corals of the United States Exploring Expedition were removed from exhibition during the year and returned to storage. Considerable progress was made in the identification of unnamed echinoderms; 8,226 identified specimens were cataloged and incorporated in the study collection.

Plants.—During the year 14,650 specimens of flowering plants and ferns were mounted, wholly by adhesive straps. In addition, 4,711 specimens were repaired and 442 photographs and 5,663 typed or printed descriptions and reference labels mounted on herbarium sheets. Specimens stamped, recorded, and ready for the Herbarium total 14,539, leaving only about 1,000 still unstamped. An accumulation of more than 30,000 specimens is still awaiting mounting. For incorporation in the Herbarium there are on hand 60,000 mounted, stamped, and recorded specimens, including sheets bearing descriptions. This year the number of specimens incorporated in the Herbarium about equaled the newly mounted material. The identification of phanerogams from continental America by E. P. Killip and C. V. Morton continues to be successfully combined with the work of incorporating material in the Herbarium family by family, but both tasks were greatly retarded by lack of curatorial assistance. A considerable number of ferns were also distributed. Dr. E. H. Walker incorporated an accumulation of Old World specimens and a large number of reference sheets and mounted descriptions of Philippine and Old World types in the collection. The segregation of type specimens from the general herbarium was continued in the course of general distribution and rearrangement of the collection. The type herbarium now consists of 43,610 specimens, of which 776 specimens

segregated during the current year have not yet been placed in the storage outside of Washington.

As in previous years, E. C. Leonard cared for the cryptogamic collections, devoting about one day a week to them, giving special attention to mosses of the Washington region. The C. G. Lloyd mycological collections, in charge of John A. Stevenson, honorary curator, continue important as a reference series of the larger fungi of the world and of the wood-rotting forms in particular. There are over 1,500 type specimens, as well as many others authenticated by comparison with the original types at Kew, Paris, and other mycological centers.

Taxidermist shop.—Mention has been made of the overhaul and improvement of the European, Australasian, Asiatic, and African exhibition series of mammals under the supervision of W. L. Brown, chief taxidermist. This rather large undertaking involved cleaning 162 mounted mammals, repairing 33, painting 60, and placing 66 on branches. The hummingbird exhibit is under renovation through placing the birds on a panel covered with monk's-cloth, instead of perching them on wooden tees placed on glass shelves. The true color of the birds will be better revealed by the use of fluorescent lighting. Nine mounted heads, a snow leopard, 20 South American hawks, 1 snow goose, and 2 large sharks were placed on exhibition. Sixteen groups of reptiles and amphibians on exhibit were completed by the addition of as many specimens. Six of these specimens were painted by Dr. Doris M. Cochran. All mounted birds in the District collection and six for the Army Signal Corps were cleaned, as well as four cases of specimens in the Smithsonian index exhibit and 49 mounted heads. Specimens mounted, or of which the mounting was nearly completed, during the year comprised 6 mammals and 43 birds. Two hares and eight birds were mounted for a Navy survival exhibit. Eight mammals removed from former exhibits were dismounted for return to the study collections, two for remounting. Accessories were completed for five snake groups and a number of leaf molds and a quantity of leaves were made. Five snakes and one newt were reproduced in celluloid, as was the head of a Nicaraguan freshwater shark; considerable progress was made on the celluloid reproduction of the nearly 25-foot, 305-pound reticulated python received from the National Zoological Park. This was skinned after molding. The miniature work included four models, nine latex molds, and the placing of models of an African elephant and a hippopotamus on bases.

For the study collections 370 mammal skins were cleaned, made up, or degreased, and one large mammal was skinned. For the ornithological study series 102 birds were skinned and made up, and 46 others cleaned, degreased, or made up.

The osteologists had a busy year, cleaning 152 skeletons of mammals, 2,885 skulls, 45 sets of leg bones, 10 sets of seal and porpoise flippers, and 14 lots of miscellaneous bones; 8 skeletons were roughed out and 6 large skeletons, 2 skulls, and 3 leg bones degreased. The skeletal work on birds comprised 62 cleaned, 45 roughed out, 1 degreased, and 1 set of skull and leg bones cleaned. A jewfish skeleton and an electric-eel skull were also cleaned.

Instruction and training in making up skins for scientific purposes were given to four individuals, one a member of the Museum staff

in preparation for a field trip; a fifth person was given instruction in the molding of feet. Some assistance was also rendered the War Department in connection with insignia design.

INVESTIGATION AND RESEARCH

Mammals.—The curator, Dr. Remington Kellogg, spent part of September at the Museum of Comparative Zoölogy at the request of the director, Dr. Thomas Barbour, examining a collection of cetacean remains from Polk County, Fla. His report, "Fossil Cetaceans from the Florida Tertiary," was completed and submitted to Dr. Barbour in December for publication. During January Dr. Kellogg served as chairman of the American Delegation to the International Conference on the Regulation of Whaling held at London. Between sessions he studied at the British Museum (Natural History) in preparation of a report on the recent porpoises. At the request of the Division of Medicine of the National Research Council, he also undertook a series of descriptive accounts of the monkeys used by investigators of the Board for the Coordination of Malarial Studies. In collaboration with Maj. E. A. Goldman, of the Fish and Wildlife Service, the first of these accounts, a revision of the spider monkeys of the genus *Ateles*, has been completed. As in previous years, the curator participated in a number of interdepartmental conferences related to the International Agreements for the Regulation of Whaling. Gerrit S. Miller, Jr., research associate, continued work on the revision of his list of "North American Recent Mammals."

Birds.—The curator, Dr. Herbert Friedmann, completed part 10, the gallinaceous birds, of Ridgway's unfinished monograph, "The Birds of North and Middle America," and began the revision of his own previously completed manuscript on the falconiform birds. In this connection, he published three papers on as many genera of game birds, describing new forms. His study of the E. G. Holt Venezuelan-Brazilian collection was continued. He also published a paper on some West African honey-guides and wrote a number of reviews of recent ornithological literature. He is cooperating with Robert T. Moore, of the California Institution of Technology, and Ludlow Griscom, of the Museum of Comparative Zoölogy, on a checklist of the birds of Mexico. The curator gave some time to work on the fifth edition of the checklist of North American birds to be published by the American Ornithologists' Union. H. G. Deignan, associate curator, completed his monograph on "The Birds of Northern Thailand," now in press, and carried on his researches into the records and catalogs of the collections, uncovering unexpected types and correcting many errors, until he left on special service concerned with the war in January. Two of his papers on Thai ornithology, an obituary notice of an American bird student, Russell Richardson II, and a paper on Burma for the Institution's War Background Studies were published during the year. Despite his absence from the Museum on war work, S. Dillon Ripley, assistant curator, published two short papers, one on a Bornean cuckoo, *Rhinortha*, and one on a wild cross in ducks. Dr. Wetmore studied a number of lots of fossil bird bones and published seven papers on them, one of them a remarkable and unusually complete terrestrial vulture of a new family from Wyoming. Unlike most fossil birds, this one was complete enough to warrant

an attempted restoration of its appearance made by Walter A. Weber. Dr. Wetmore also published a number of short notes on North American birds and devoted a large part of his research time to the manuscript of the fifth edition of the A. O. U. Check List of North American Birds. His report on "A Collection of Birds from Northern Guanacaste, Costa Rica," published by the Museum, appeared only a few days after the close of the year. Dr. E. M. Hasbrouck, volunteer worker in the division, published a paper on the status of the European widgeon in North America.

Reptiles.—The associate curator, Dr. Doris M. Cochran, made further substantial progress in her studies on South American frogs. She also undertook to expand her popular handbook on "Poisonous Reptiles," No. 10 of the Smithsonian War Background Studies, into a treatise on "Dangerous Reptiles," nonpoisonous as well as poisonous, for the Appendix to the Smithsonian Annual Report. She also contributed a section on the preservation of reptiles and amphibians to the Institution's field collector's manual, and prepared copy for a mimeographed circular on the reptiles and amphibians of the South Pacific Islands.

Fishes.—The curator, Dr. L. P. Schultz, made notable progress with his studies on the extensive material that he collected in Venezuela, finishing a report on the Characinidae, in press at the close of the year, and completing manuscript for the families Gymnotidae, Cichlidae, Cyprinodontidae, Dasyatidae, Tetraodontidae, and Centropomidae. Dr. Schultz's report on "The Catfishes of Venezuela" was published in February in the Museum Proceedings. Dr. Robert R. Miller, associate curator, described two new species of fishes from the northwest coast of Mexico, and undertook a study of the Chinese fishes collected by Dr. D. C. Graham some years ago.

Insects.—The curator, Dr. E. A. Chapin, made further progress with the manuscript embodying the results of his investigations on the genus *Hippodamia* and continued work on other sections of the Coccinellidae.

In the Orthoptera and neuropteroid insects, Dr. H. K. Townes completed for publication a genotype catalogue of the Dermaptera, before undertaking other studies now in progress involving the classification of the group. One of these studies is a revision of the Nearctic species of Dermaptera, of which only 16 are known at present; another is a generic classification of the order. Dr. Townes has found good bases for the recognition of 4 families and discovered a number of new characters that materially facilitate generic grouping within the families.

In the Coleoptera, Dr. A. G. Böving continued work on the larvae of the family Anobiidae and also prepared preliminary keys for the generic identification of larvae of the Cerambycinae and Lamiinae, thus expediting their identification. Dr. W. H. Anderson continued work on curculionid larvae and completed the preliminary descriptions of the genera for which the larvae are known. His work on larvae has been much curtailed since taking over work on the adults of the Scolytidae following the death of Dr. M. W. Blackman. Special attention was given to various structures requiring slide preparation and 172 permanent slide mounts have been completed. New characters were discovered that materially assist the definition of hitherto difficult species. W. S. Fisher continued his study of the North American Anobiidae, placing emphasis upon the groups containing

North American forms of economic importance. Further, very satisfactory progress has been made on a revision of the North American Bostrichidae, a group containing many species causing serious damage to finished lumber, lead cables, and stored vegetable products.

In continuation of his detailed taxonomic studies on the white-fringed beetles, L. L. Buchanan completed statistical analyses of more than 1,200 specimens representing all the main populations of the *leucoloma* complex now occurring in the United States. Dr. J. M. Valentine's research was confined almost wholly to the Elateridae of the genus *Drasterius* and closely allied groups. Dr. Valentine himself prepared all the illustrations for this paper and, as most of the specific descriptions have been written, it should be completed before the end of next year. As a contribution to a volume of scientific papers which will be published in honor of Professor Petrunkevitch, of Yale University, Dr. Valentine completed a research study begun several years ago presenting certain aspects of speciation through an analysis of a restricted cave fauna of Carabidae.

Two parts of Dr. R. E. Blackwelder's "Checklist of the Coleopterous Insects of Mexico, Central America, the West Indies, and South America" were published during the year by the Museum (Bulletin 185).

Virtually no research could be conducted on the Lepidoptera because of reduced personnel and the marked increase of service activities. Some attention, however, was given to the classification of lepidopterous larvae begun by Carl Heinrich and H. W. Capps two years ago and to certain segregates of the Phycitidae, a revision of which has also been under way for several years. One of the division's artists devoted the greater part of her time to the preparation of more than 200 detailed drawings for this revision.

In the Heteroptera a revision of the pentatomid genus *Solubea* was published by Dr. R. I. Sailer, who also nearly completed a manuscript on the North American species of Cydnidae of the genus *Pangaeus*. Extensive revisions were also made in his manuscript on the cydnid subfamily Coreimelaeninae. While reorganizing the collection of Triatominae, an annotated card catalog was compiled. As this is undoubtedly the most complete index available anywhere, it is proposed to prepare it for publication at the first opportunity. Intermittent work has been done on the aphid genus *Macrosiphum*. As the group is enormous, containing many difficult sections, this undertaking cannot be completed short of four or five years at the present rate of progress. Research on the genus *Aleuroglandulus* of the Aleyrodidae begun last fiscal year was completed and published, and a critical study of certain very difficult sections of the genus *Aleuroplatus* was submitted for publication.

In the Diptera, because of the war, all Dr. Alan Stone's time was given to service work on mosquitoes. Acting on a suggestion coming from Navy sources, Dr. M. T. James devoted himself to the preparation of a manual for the identification of Diptera involved in human myiasis. Most of the required new illustrations were completed by one of the Bureau's artists, and about half of the manuscript written. A little time was given to the study of the anthomyiid genus *Cordilura*. C. T. Greene gave special consideration to certain species of the groups of *Agromyza* frequently received for determination, and in which definite identification have hitherto been impossible. A study

of both larvae and adults revealed that certain segregates in those complexes can be set off rather sharply and definite names assigned, a matter of considerable importance in connection with the identification of the abundant material received from the Division of Foreign Plant Quarantines.

In the Hymenoptera research work on the Ichneumonidae was confined largely to an attempt to complete the generic revision of the tribe Ophionini. In this connection, the species of the included genus *Enicospilus*, as represented in Hawaii, were revised and the resulting paper submitted for publication. Some work was accomplished and published on the ichneumonid genus *Exentrus*. For several years past A. B. Gahan has given most of the time available for revisionary work to developing a sound family classification of the Chalcidoidea, making encouraging progress with the problem during the current year.

Working on Thysanoptera, J. C. Crawford has made further progress in checking and correcting the large manuscript originally prepared by Dudley Moulton on the North American *Frankliniella* while temporarily employed by the Division of Insect Identification. Mr. Crawford also prepared and published a paper describing a new genus and species having significance as a virus vector in South America. He also continued his study of the species *Sericothrips* occurring in the eastern part of the United States.

The time that Dr. H. E. Ewing was able to devote to research work on ectoparasites was given over to a study of the trombiculid mites (chiggers).

The morphologic study on "The Feeding Apparatus of Biting and Disease-carrying Flies," by R. E. Snodgrass, published by the Smithsonian Institution in 1943, aroused such interest that not only was the first edition soon exhausted, but a demand was created for a consideration of the subject on a broader basis. Mr. Snodgrass therefore undertook and completed a larger paper entitled "The Feeding Apparatus of Biting and Sucking Insects Affecting Man and Other Animals." This extension of the earlier paper covers, besides the Diptera, the Mallophaga, Anoplura, Siphonaptera, and Hemiptera, with an enlarged introductory section on the feeding mechanism of the cockroach and notes on the relation of the various species to disease. During the year Miss M. M. Carpenter completed a bibliography of biographies of entomologists based on a paper of the same title published many years ago by J. S. Wade, Bureau of Entomology and Plant Quarantine. She also continued to accumulate material for an entomological bibliography of the West Indies.

Marine invertebrates.—The curator, Dr. Waldo L. Schmitt, completed more or less urgently needed identifications of decapods and gave some attention to a revision of the American lithodid crabs. Clarence R. Shoemaker, associate in zoology, since his retirement as associate curator on March 31, 1944, has given virtually his entire attention to the revision of the amphipod fauna of the east coast of North America. A study of the genus *Unicola* is nearing completion.

In connection with his studies on the bryozoan collections, Dr. R. S. Bassler reports that, although the collection of recent Bryozoa has necessarily not received as much attention as usual during the past year, he nevertheless has been able to prepare and identify three

collections of Arctic material and a fair number of miscellaneous specimens from other parts of the world.

This year Dr. J. A. Cushman, collaborator in Foraminifera, gave special attention to well and surface samples from the Atlantic and Gulf Coastal Plain regions, and completed monographic studies of several foraminiferal genera, in part published and in part in press, as well as certain faunal studies of recent shallow-water Foraminifera of New England, and various Eocene and Cretaceous foraminiferal faunas from type localities.

Mollusks.—The curator of mollusks, Dr. Paul Bartsch, in collaboration with Dr. Carlos de la Torre, worked on their monograph on the Cuban urocoptid land mollusks, and about two-thirds completed his monographic study of the East Pacific recent and fossil mollusks of the family Turridae. The curator and the associate curator, Dr. H. A. Rehder, continued work on their joint project on the Hawaiian gastropod mollusks, while Dr. Rehder also did considerable research on the West Atlantic marine mollusks as called for by inquiries from various sources. These studies furnished material for six published papers, two jointly with the curator. Two papers based on studies completed by the assistant curator, Dr. J. P. E. Morrison, were also published during the year.

Echinoderms.—The curator, Austin H. Clark, completed Part 4 of Bulletin 82, "A Monograph of the Existing Crinoids," except for assembling the plates. The account of the large family Thalassometridae is in final form, and that of the smaller family Charitometridae was nearly finished. The identification of the echinoderms collected by the U. S. Fish and Wildlife Service trawler *Pelican* was almost completed, except for the Holothuroidea, and work begun on the Ophiuroidea of the *Albatross* Hawaiian Expedition of 1902. A paper on a new fossil comatulid from the Cretaceous of Cundinamarca, Colombia, was prepared and submitted for publication.

Plants.—Research by members of the staff centered largely on activities directly associated with the war, and on extensive South American collections. In working over this South American material, which includes large recent collections, as well as a considerable accumulation of specimens received for identification in the past, the associate curator, E. P. Killip, assembled much valuable data for the proposed "Flora of Colombia," while making progress on other monographic studies, notably the Papilionaceae of Colombia and the amaryllidaceous genus *Bomarea*. Critical studies of special groups from the northern Andean region were carried on by the curator, Dr. W. R. Maxon, who published descriptions of several new ferns; by the assistant curator, C. V. Morton, who published an account of the Solanaceae and prepared revisions of the genera *Monopyle* and *Smithiantha* of the family Gesneriaceae and descriptions of various new species of Malpighiaceae; and E. C. Leonard, assistant curator, who has in preparation a synopsis of the family Acanthaceae as represented in Colombia. In addition, Mr. Leonard described three new species of Acanthaceae from Panama and completed a paper on the Acanthaceae of the Sonoran Desert, while Mr. Morton submitted for publication a critical review of the Mexican phanerogams described by the late Marcus E. Jones and continued the preparation of his synoptical catalog of Cuban plants. Dr. E. H. Walker, assistant curator, prepared a revision of the genera *Distylium* and *Sycopsis*

(Hamamelidaceæ). Mrs. Agnes Chase, custodian of grasses, continued studies of South American grasses, as well as those of Papua and Australia. Dr. F. A. McClure, research associate in botany, is engaged in a study of American bamboos, largely on the basis of material assembled through recent field work.

Diatoms.—The associate curator, Paul S. Conger, continued study of the diatoms of the Presidential Cruise of 1938 and of those of the Atlantic coast. He prepared for publication the description of a new method for making micrometric rulings on glass. Additional information on a general account of diatoms was assembled, and experiments on new methods and materials of microtechnique pertaining to diatom preparation continued.

The number of lots of specimens sent in with requests for identification were as follows: Mammals, 43; birds, 32; reptiles and amphibians, 13; fishes, 32; insects, 107; marine invertebrates, 51; mollusks, 62; corals, 1; plants, 254; diatoms, 5; a total of 600, calling for the identification of approximately 18,388 specimens. The number of requests for information made in person, by letter, or by telephone, other than identifications, always greatly exceeds the requests for identifications alone. The division of insect identification of the Bureau of Entomology and Plant Quarantine received 33,396 lots of insects for determination, from which 57,466 specimens were identified. Of this total 1,494 specimens, representing 835 lots, were determined in the division of insects.

DISTRIBUTION AND EXCHANGE OF SPECIMENS

Duplicate zoological specimens distributed to museums, colleges, high schools, and similar institutions, government agencies, and private individuals aggregated 82 transactions, 3,998 specimens; 1,834 specimens were sent out in exchange, 1,756 as gifts and 408 as transfers to military and naval centers. The 8,656 plants distributed were sent out as exchanges to 58 institutions and correspondents. In addition, 4 photographs, 1 drawing, and 1 painting were sent out in exchange; and 86 photographs and 6 drawings were distributed as transfers.

NUMBER OF SPECIMENS UNDER THE DEPARTMENT

The summary of specimens given below is based on the numbers estimated for the previous fiscal year, with the addition of the specimens accessioned during the present year and the deduction of specimens removed during the same period. The figures of the early estimates were approximate and have been revised from time to time. No estimate has as yet been made for the corals, nor does the number of plants include the lower cryptogams and duplicates. In several of the divisions lots consisting of minute organisms are frequently counted as single specimens, though they may contain hundreds and even thousands of individuals, the enumeration of which could serve no useful purpose.

As the result of a typographical error, the number of helminths in the collection was given in the annual report for 1933 as 144,255 when it should have been 41,255. Therefore the count has been revised. It now corresponds to the actual number of helminthological catalog entries, 34,828. Although any one of these entries may embrace from one to several thousand specimens, each has been considered as

representing a single lot and is counted as one specimen as in the case of minute organisms referred to immediately above.

Mammals		246, 302
Birds:		
Skins	289, 078	
Alcoholics	10, 076	
Skeletons	18, 128	
Eggs	90, 424	
		407, 706
Reptiles and amphibians		128, 145
Fishes		1, 300, 639
Insects		5, 547, 707
Marine invertebrates		1, 047, 152
Mollusks		3, 071, 747
Helminths		34, 828
Echinoderms		177, 246
Plants		1, 863, 000
Diatoms		45, 000
Total		13, 869, 472

DEPARTMENT OF GEOLOGY

(R. S. Bassler, *Head Curator*)

The past year was saddened by the death of two esteemed members of the geological staff, Dr. Charles E. Resser, curator of invertebrate paleontology and paleobotany, and Dr. E. O. Ulrich, associate in paleontology. Dr. Resser, who will long be remembered for his studies in Cambrian paleontology, died on September 18, 1943, after an illness of less than a month, in the prime of life and scientific productivity. Doctor Ulrich, world authority on American Paleozoic stratigraphy and paleontology, was busy with research work at the Museum until his eighty-seventh birthday, when his health failed, and several weeks later, on February 22, 1944, he passed away.

Curator William F. Foshag was still occupied in Mexico with his supervisory work in surveys for strategic minerals, and Associate Curator C. Lewis Gazin continued on military detail in the United States Army.

Despite these personnel losses the curatorial work was carried on, and the war activities and good-will program of the Smithsonian Institution were continued as heretofore. Dr. G. A. Cooper completed his survey of Illinois Devonian oil strata and continued field and laboratory studies of the geology of northwestern Sonora, the latter in collaboration with the Instituto Geológico de México. A month and a half of field work in Sonora, in association with his Mexican colleague, Ing. A. R. V. Arellano, resulted in good paleontological collections and considerable increase in knowledge of the structure and stratigraphy of the area.

Field work in vertebrate paleontology, usually our best source of striking exhibition material, was necessarily restricted this year. In a short trip to the nearby Calvert Cliffs on Chesapeake Bay, Curator C. W. Gilmore and his assistants had the good fortune to excavate a sirenian skeleton of Miocene age, a fossil sea-cow over 10 feet long. In the laboratory the work accomplished on the study and exhibition series of fossil vertebrates compares favorably with other years. The actual number of specimens received in all divisions of the department, as anticipated, was the smallest for several years.

Information supplied by the staff and the use of the collections in furnishing necessary data to research workers and representatives of the war agencies reached a new high mark. Finally, the many visiting servicemen, representing a clear-cut cross section of American life, have been so frank in their questions and remarks on the exhibits that much of value for future work has been learned. Their comments have been of particular value in revealing the most appealing type of exhibition label, namely, a placard explaining in several lines of rather large black type the essential features of each display case.

Associate Curator G. Arthur Cooper was promoted to the curatorship of the division of invertebrate paleontology and paleobotany on

October 2, 1943, and Dr. John B. Reeside, Jr., of the Geological Survey, was appointed custodian of the Mesozoic collections on June 19, 1944.

ACCESSIONS FOR THE YEAR

Approximately 3,466 specimens listed under 123 accessions were receiving by the department during the year, in contrast with 133 accessions and 9,725 specimens for 1942–43. Listed by divisions, these are distributed as follows: Mineralogy and petrology, 74 accessions (373 specimens); invertebrate paleontology and paleobotany, 41 accessions (3,076 specimens); vertebrate paleontology, 8 accessions (17 specimens).

Mineralogy and petrology.—Income from the Roebling fund, providing for the purchase of important gems and minerals, was used this year to procure 31 gem stones of rare quality and high exhibition value. Of these the following deserve special mention: Nine zircons from Indo-China, ranging in weight from 9.4 to 118.05 carats, and white, blue, brown, yellow, and green in color; a Madagascar pink morganite of 56 carats; 6 spinels from Ceylon, 3.2 to 22.05 carats in weight, and purple, red, pink, orange, and blue in color; a 4-rayed star garnet from Emerald Lake, Idaho; 4 tourmalines of yellow, red, and pink colors, from Brazil, averaging 35 carats; a black star spinel from Ceylon, 6.61 carats; and a cat's-eye emerald of 4.56 carats from Colombia. Included also were a blue fire Mexican opal of 55.98 carats and a Brazilian green beryl of 113.9 carats.

Two other gems of particular interest are an aquamarine of 15.3 carats from Idaho, donated by Arthur Montgomery, and a beautiful pink Brazilian topaz of 34.1 carats, secured through the Frances Lea Chamberlain fund.

Two mineral accessions were credited to the Roebling fund, namely, four unusually formed quartz crystals from Dona Ana County, N. Mex., and eight transparent colorless scheelites from Kernville, Calif.

Minerals secured through the Canfield endowment fund embraced two specimens—a libethenite (basic copper phosphate) from Yerington, Nev., and a covellite (copper sulphide) from Butte, Mont.

In spite of the relatively few minerals obtained during the past year as compared with normal times, a fair number is recorded as a result of the associate curator's efforts to interest persons to collect for us. Once the importance of the Museum's collection is realized, such persons are likely to continue an interest in its growth. Important minerals added to the collection are given below.

From Minas Gerais, Brazil, there came a fine crystal of muscovite mica from Espera Feliz, donated by Fioravanti Padula, and a pseudomorph after either columbite or polycrase from Municipio of Juiz de Fora, gift of José Ferraz Simoes; attractive specimens of pitchblende, malachite after heterogenite and some cassiterite from the Belgian Congo, as well as a good example of microlite from New Mexico, were presented by Dean F. Frasche. A number of specimens representing weinschenkite (yttrium phosphate) from Kelly Bank, Vesuvius, Va., were transferred by the Geological Survey. This is the first occurrence of this rare mineral in our country. The zeolite series was increased by the gift of W. Harold Tomlinson of natrolite, chabazite, and related minerals, from the locality of Perkiomenville, Pa. An interesting exhibition specimen, a limonite group pseudomorph after

siderite from Roxbury Station, Conn., was presented by Mr. and Mrs. Edward J. Marcin. Garn A. Rynearson presented a well-crystallized specimen of uvarovite (chromium garnet) from Blue Point claim, Tuolumne County, Calif. A specimen of lithiophilite (lithium manganese iron phosphate) from the Black Hills of South Dakota was received from Prof. D. Jerome Fisher. Floyd A. Rapp continued his interest by collecting and presenting a specimen of wocheinite, a variety of bauxite, from Paranam, Dutch Guiana. A large sample of kämmererite (chromium bearing chlorite mica) from Klamath Mountain, Oreg., was received from Richard H. Jahns. Another large specimen, one of manganotantalite, was obtained through James S. Baker, chief, Minor and Rare Metals Section of the Foreign Economic Administration. The same organization, through Mr. Baker, transferred specimens of columbite and tantalite and an unusual example of pitchblende with its alteration products, all from Brazil. Mr. Baker personally presented the Museum with a specimen of native silver and chalcocite from the Cole mine at Bisbee, Ariz., which he had collected there some years ago.

Frank L. Hess showed his usual interest in the collections by donating a specimen of dendritic uraninite (uranium ore) from the Gordonia District, South Africa. Walter C. Warren presented a specimen of boehmite clay from King County, Wash. Maurice Slavin, on a return visit from Brazil, brought the Museum three tantalite crystals and a specimen of simpsonite (tantalate of lime and alumina) from Solidada, Brazil. A gift from Richard Lemke comprised a tourmaline and an aquamarine, both from Amelia, Va. A fine crystal of scheelite from Nivloc, Nev., came as a gift of William J. Moore (deceased). Miss Jewel J. Glass, of the Geological Survey, secured for the collections a number of pink triplite specimens (manganese iron phosphate) from Tungstonia, Nev. Through the courtesy of Arnold Hoffman, calcite crystals were obtained from two producing localities, Clyde Park, Mont., and Palm Wash mining district, Truckhaven, Calif. Mrs. Mary Fox supplied seven specimens of muscovite mica from the quarries near Custer, S. Dak. A manganocolumbite sample from Greenbushes, Southwest Australia, was presented by F. G. Forman, Geological Survey of Western Australia.

Seven new meteorites have been added to our collection, six of which are undescribed falls. An 82-gram slice of the Lowicz, Poland, meteorite was obtained through exchange with the American Museum of Natural History. One complete individual stone, weighing 12 pounds, 7 ounces, of the Cavour, S. Dak., discovery was added to the Roebling collection. A slice, weighing 142 grams, of a new stony meteorite from San José, Tamaulipas, Mexico, first recognized by the U. S. National Museum, came to us as a gift from the Texas Memorial Museum at Austin. A specimen of the María Elena, Chile, fall, weighing 15.5 kilograms, was recorded from Señor Coope and Fernándo Araya Valdés. Dr. Stuart H. Perry continued his annual gifts to our collection with the presentation of the following meteorites:

New Westville	Preble County, Ohio	Iron	4.8 kg.
Edmonton	Metcalfe County, Ky	Iron	10.2 kg.
Penokee	Graham County, Kans	Stone	3.58 kg.
Cavour	Beadle County, S. Dak	Stone	4.31 kg.
Linwood	Nebraska	Stone	46.0 kg.

In addition to these specimens Dr. Perry presented a duplicate set of the 5-volume album containing 1,500 photomicrographs of meteorite structures.

The largest addition to the ore collection, a transfer from the Metals Reserve Co., consisted of a series of manganese and chromium ores from foreign deposits all over the world. Specimens were selected from the Baltimore, Md., stockpile, representing localities in South Africa, India, Egypt, Turkey, Philippines, Brazil, and Cuba. The Geological Survey transferred tungsten specimens from Idaho, California, and North Carolina deposits. The Southern Railway System donated a collection of copper, chromium, manganese, and miscellaneous ores from the southeastern United States from deposits along their rail lines. The Republic Mining & Manufacturing Co. through Lawrence Litchfield, Jr., presented eight specimens of French bauxite, and C. I. Dismant donated a gold ore sample from the Itogon mine, Benguet Province, Philippines.

Additional interesting ores donated to this series are as follows: Specimens of sylvite and blue halite from the U. S. Potash Co. mine near Carlsbad, N. Mex., from C. M. Boos; bauxite from the "lignite" stockpile near Bauxite, Ark., gift of J. P. Labaw; and specimens of Arkansas cinnabar from William A. Riggs. Specimens of bauxite and miscellaneous minerals from Dutch Guiana and other localities were obtained in an exchange with F. W. Horton.

Three large porphyritic granite specimens sent to the Museum from Lemhi County, Idaho, by J. A. Herdlick, will be very useful in the petrographic exhibits. The Arkansas Geological Survey, through H. E. Wheeler, presented a specimen of novaculite from Hot Springs, Ark. One lot of unusual concretions was obtained from near Lévis, Canada, through the kindness of Frank L. Hess. Five specimens of septarian concretions in marcasite from the Devonian rocks near Amherst, Ohio, formed a gift from Claude C. Hamel.

Invertebrate paleontology and paleobotany.—The slight decrease in accessions and the smaller number of specimens received this year are not accompanied by a similar decrease in value, because important material for scientific study was secured, partly as a result of careful selection of specimens.

The most important new material is comprised in approximately 500 specimens of rare Paleozoic fossils collected for the Museum by Curator Cooper during his field work in northwestern Sonora, Mexico. This region has never been thoroughly studied, and consequently even the comparatively small collections of good Permian and Cambrian fossils obtained represent important additions to knowledge. Besides the Mexican fossils, Dr. Cooper secured about 500 specimens of Middle Ordovician invertebrate fossils in southwestern Virginia and eastern Tennessee while studying the stratigraphy of these areas. These fossils included some unusual new crinoids and cystids, as well as a good selection of bryozoans and brachiopods.

Other worthy additions to the Paleozoic biologic series are contained in the following gifts: Middle Cambrian fossils from the Cloud Rapids formation of Newfoundland from the Department of Geology, Princeton University, through Prof. B. F. Howell; Cambrian and Early Ordovician brachiopods from Lévis, Quebec, from Dr. Franco Rasetti, Laval University; Cambrian brachiopods from Oklahoma collected by Dr. Charles E. Decker, University of Oklahoma; in-

vertebrate fossils of high Ordovician age from Frobisher Bay, Southwest Baffin Land, from Capt. Robert A. Bartlett; invertebrate fossils from the Detroit River Devonian formation of north-central Ohio, collected by Dr. Erwin C. Stumm, Oberlin College. Portions of seven cores representing the Devonian parts of deep wells in Illinois were received from the Gulf Refining Co. These cores contained numerous fossils which will help to determine the underground geology of the area. Charles Southworth presented fine biological material to the collection in the form of 500 s ecimens of Middle Devonian brachiopods, making up the choice examples of a season's collecting.

Carboniferous brachiopods and crinoidal remains from northeastern Washington, useful in deciphering the age relations of the associated rocks, were presented by John P. Thomson. A transfer from the Geological Survey of Devonian invertebrate fossils from the Dyer formation of northwest Colorado contains material essential in determining the geology of this area.

Plaster casts of type fossils today have great scientific value, in view of the destruction taking place in foreign museums. Such a cast, an important English Carboniferous crinoid, *Poteriocrinites crassus* Miller, the holotype and only specimen of which was in the ill-fated Bristol Museum, England, was a welcome gift of the British Museum (Natural History) early in the year. Another valuable addition was a set of type casts of several crustaceans and a new comatulid crinoid from the Cretaceous rocks of Colombia, through the good offices of Prof. José Royo y Gómez, of Bogotá.

Nine accessions should be especially mentioned as they contain type specimens: Cotypes of the foraminifer *Pseudophragmina* (*Athecocyclina*) *macglameriae* Vaughan came as a gift of the Alabama Geological Survey, through Dr. T. Wayland Vaughan; fragments of the holotype of the Devonian bryozoan *Trachytoechus moniliformis* Fritz was presented by the Royal Ontario Museum of Paleontology, through Dr. Madeleine A. Fritz; paratypes of the Pleistocene mollusk *Vitrinella shimeri* Clapp, from subway excavations in Boston, Mass., were received from the Museum of Comparative Zoology, through W. J. Clench; 37 types and figured specimens of Mesozoic and Cenozoic echinoids figured in Clark and Twitchell's "Mesozoic and Cenozoic Echinodermata of the United States," U. S. Geological Survey Monograph 54, deposited by Johns Hopkins University, through Dr. C. T. Berry; slides of thin sections of larger Foraminifera from the Eocene rocks of Venezuela, a gift from Dr. H. G. Kugler, through Dr. T. Wayland Vaughan, including cotypes, typotypes, and plesiotypes of described species; Lower Cretaceous cephalopods from Texas, 22 specimens including 2 primary types to be figured by Miller and Harris; a gift from Dr. A. R. Loeblich, Tulane University, through Dr. A. K. Miller, University of Iowa, paratypes of 11 species of marine mollusks from the Miocene of California, described by Dr. Myra Keen and obtained in an exchange with Stanford University; the holotype of the Cretaceous coral *Microsolena williamsonensis* Wells, gift from Dr. J. W. Wells, Ohio State University; 76 recent and Cenozoic corals from Venezuela collected by Dr. H. Hedburg, including 14 holotypes, 12 paratypes, and 27 figured specimens also described by Dr. J. W. Wells and presented by him.

Outstanding gifts to the Cenozoic study series were 47 specimens of mollusks, 2 crabs, 1 echinoderm, and 6 lots of fishes from Dr. S. F.

Blake, representing material from the Pleistocene at Wailes Bluff, Md.; 760 specimens of Tertiary fossils from the Galápagos Islands, from Dr. Saul Schwartzbach, especially interesting in working out the geological history of this classical area in the study of evolution. A gift and an exchange of Miocene fossils from Hugh H. Iltis added several hundred desirable mollusks, Bryozoa, and Ostracoda to the collections.

Vertebrate paleontology.—The impossibility at the present time of carrying on any field work other than trips to nearby localities has necessarily reduced the number of accessions in this division.

The Calvert Cliffs near Plumpoint, Md., celebrated for their Miocene outcrops, yielded the most important accession of the year—partial skeleton of a sirenian, or sea-cow, excavated by members of the staff and William Salter. This specimen is unique in being not only the most complete skeleton but also the first from this area to retain a well-preserved skull. Its detailed study will doubtless make it possible to establish the identity and relationships of many fragmentary sirenian specimens now in the collection.

From nearby Scientists Cliffs on Chesapeake Bay came gifts of the teeth of the fish *Dictyodus* from Mrs. S. Karrer and of a metacarpal of a fossil seal from Dr. S. F. Blake.

A composite skeleton of the extinct antelope *Stockoceras onusrosagris* (Roosevelt and Burden), from the Papago Springs Cave in Arizona, and the cast of a complete skull of the curious 3-horned antelope *Synthetoceras tricornatus* Stirton, from Texas, were received as gifts from Childs Frick. Both specimens represented genera new to the collection.

Casts of the type specimen of the flying reptile *Dermodactylus montanus* Marsh and of a skeleton of the rare Triassic armored reptile *Hypsognathus fenneri* Gilmore were received in exchange with the American Museum of Natural History.

The ichnite collection was enriched by nine slabs containing the trails of *Paramphibius didactylus*, once considered a vertebrate animal but now regarded as a horseshoe crab. These slabs came from the Chemung shales of Pennsylvania, received in exchange with Charles F. Smith.

INSTALLATION AND PRESERVATION OF COLLECTIONS

Exhibition work has progressed in all divisions of the department but along lines requiring no structural material or building alterations and on a smaller scale because of the diminished staff. Cleaning of the exhibits, their better arrangement, and the preparation of more readable labels constituted the major tasks of the year.

The arrangement of the geological exhibit in such a way as to bring out the orderly development of life and of the earth's mineral products has been commented upon favorably by our visiting servicemen. As the visitor enters the east hall from the rotunda, John Elliott's striking mural "Diana of the Tides," illustrating the various phases of geology as revealed in a modern setting, first attracts his attention. The seashore in the painting is then brought to life on the exhibition floor, where an actual fossil sea beach of far distant Cambrian time, with ripple marks and animal tracks, is displayed. From this, one can pass in review all the stages of life evolution upon the earth, from the simplest plants up through the ferns, cycads, and

conifers and the one-celled animals, through the shells, Crustacea, fish, and reptiles to the most developed flowering plants and the highest mammals—a real "Parade of Life." The hall of physical geology is next in order, with its exhibits of modern phenomena ranging from caves to volcanoes and coral islands to mountain building and concludes the department's display on this floor. The study of man follows logically, and so the next hall is devoted to the African tribes exhibit of the department of anthropology. Should the visitor enter geology from this hall, he simply reviews the earth's story in reverse order. Similarly, on the second floor just above, the inorganic side of geology is presented. The minerals and gems of most elementary composition are located nearest the entrance and one passes in regular order through the interesting oxides, sulphides and carbonates to the most complicated ores and rocks. Here again the department of anthropology follows with the most logical exhibit, one of primitive man and of the part played by ores and minerals in his evolution.

In mineralogy and petrology the revision of the gem exhibit by relining the remaining cases and relabeling the entire collection was completed. The former method of displaying one or more gems on white velvet pads proved to be too monotonously symmetrical, and so a more random style was adopted to show related stones grouped to indicate their color possibilities and geographic association. The less important specimens were removed and incorporated in the gem study collection. The installation of three new gem cases, one containing various strands of beads, another to illustrate jade and jade substitutes, and the third for amethysts and related quartz minerals, was a part of Mr. Benn's work in this division.

A special diamond case was prepared shortly after the receipt of the "Punch" Jones diamond as a loan for public display. This 34.46 carat stone, the largest alluvial diamond in America, was found at Peterstown, W. Va. The owners and codiscoverers of the stone, William P. and Grover C. Jones, have lent it to the Museum for an indefinite period. Another diamond exhibit consisting of crystals and models of famous large stones was installed in a case containing a geologic series illustrating the rocks occurring at the African Kimberley diamond mines and the Pike County, Ark., deposits.

The preparation and installation of ground-glass partitions in the large upright mineral exhibition cases by Messrs. Benn and Reberholt were also completed. This change marks a decided improvement, as the partitions hide the backs of specimens on opposite sides of the case and also aid in emphasizing the mineral colors. The most noteworthy task completed during the year was the consolidation of the three mineral study collections into one continuous series, a major undertaking which has been under way for several years. In the hall of physical geology there was installed a long upright case illustrating vein and dyke structures, and also an exhibit illustrating the classification of all types of rocks to replace the igneous rock exhibit which was dismantled last year. When public interest in the volcano Parícutin was at its height a temporary exhibit was placed in the foyer to demonstrate its history and lava products through photographs and specimens supplied by Dr. Foshag.

A card catalog of all the mineral names represented in the collections has been finished, and an index of all valid described minerals as well as discredited ones is well under way.

B. O. Reberholt, in charge of the grinding and polishing laboratory, reports the following work accomplished during the year: Preparation of 325 thin sections of rocks and fossils, polishing and etching of 27 meteorites, and cutting and polishing of 330 mineral, rock, and ore specimens. Some large specimens were cut and polished for war agencies; in some cases this was entirely a matter of service, but usually the Museum obtained a generous portion of the materials cut.

The loss of Dr. Resser early in the fiscal year necessitated a revision of the plans for invertebrate paleontology. Likewise, there was a delay in the completion of the long wall exhibition case for paleobotany requiring postponement of finishing this exhibit as planned. Dr. Cooper rearranged several sections of the biologic series in more logical position; for example, the trilobites and all other arthropods now are in consecutive order completely filling two rooms. Similarly, several portions of the stratigraphic series have been consolidated into a single continuous one.

Identification of the study collections, by members of both the Museum and the Geological Survey staff proceeded as usual. The work of processing all the small accessions was kept up-to-date, but comparatively little could be accomplished in reducing the backlog of unprepared material. The head curator made a slight impression along the latter line in preparing and identifying several Paleozoic faunas with which he was familiar, namely, the Holland Patent slates of New York, the Hermitage and Lebanon limestones of central Tennessee, and the Upper Richmond beds of Ohio. He has continued work on the collections of microscopic fossils and also prepared and identified three recent faunas of Bryozoa from the Arctic for the department of biology.

As a part of the care of the collections, the progress made in building up the department library deserves special mention. Through the gifts of the Walcott, Teller, Ulrich, Resser, and other libraries, many books and thousands of pamphlets covering all phases of geology and paleontology have been accumulated. These were too heterogeneous and bulky to handle as a single library. Accordingly, Miss Helena M. Weiss undertook the classification and arrangement of the material as time would permit. Starting with the Merrill library as a basis, she has built up a section of general geology with over 12,000 pamphlets alone. Paleontology was separated into four separate collections distributed in their appropriate sections of the Museum, Paleozoic invertebrates being represented by more than 16,000 pamphlets, Mesozoic and Cenozoic invertebrates and paleobotany by a smaller number. These have all been marked with the Museum stamp, and the cataloging of the books is proceeding slowly. Miss Weiss also has charge of the loan of books from the library.

Dr. Cooper spent much time in preparing his collections from northwestern Sonora. These fossils are preserved mostly in limestone. All the Cambrian fossils had to be prepared by excavating them with needles or other small tools. The Mississippian and Permian fossils, on the other hand, were prepared by means of acid and tools. The limestone containing the Permian fossils is very impure, and conse-

quently most of the shells had to be excavated from a siliceous residue after decalcification of the matrix.

Early in the fiscal year the 60-gallon stone vat prepared for the etching of fossils was delivered and mounted. Since then it has been in continuous use in dissolving the west Texas Permian limestone blocks, thereby freeing the silicified fossils they contain. The results have been most gratifying, a single large block weighing up to 20 or 30 pounds often yielding two to three standard drawers full of free and clean shells in a perfection of preservation that could be attained in no other way.

Curator C. W. Gilmore reports for the division of vertebrate paleontology that during the past year a unique specimen was added to the exhibition series in the form of a large rock slab from the Eocene of Wyoming showing the shells of 15 swamp turtles *in situ*. These turtles (*Echmatemys*) are worked out in relief, care having been exercised to preserve them in their original relationships. At one corner of the block a section of the bank with two specimens partly excavated, assists the visitor in visualizing how all were originally buried in the rock.

A complete skull of the large Upper Cretaceous fish *Portheus molossus* Cope and one of *Ichthyodectes anaides* Cope, both from Kansas, were prepared and placed on exhibition to replace specimens of less display value.

In addition to supervising the work in the laboratory and preparing the exhibits mentioned above, Norman H. Boss, chief preparator, prepared various other vertebrate fossils, one of the more important being the skull and part of the skeleton of the flying reptile *Pteranodon occidentalis* Marsh, from the Niobrara chalk of Kansas. Thomas J. Horne was almost continuously occupied with the preparation of specimens of the 1942 Oligocene collection from Wyoming, work that had been practically completed by the close of the fiscal year.

Mention should also be made of the renovation of all the cases and large exposed skeletons in the main exhibition hall. Nearly four weeks were spent by the preparators in completing this work and making necessary repairs, but the much improved appearance of the hall compensates for the time required.

INVESTIGATION AND RESEARCH

Dr. W. F. Foshag was occupied with his investigations on the mineral resources of Mexico for the Geological Survey during the entire year. His work is largely being incorporated in a report for that agency. In addition, he has spent some time at the Parícutin volcano making observations and collecting material for the Museum exhibition series.

E. P. Henderson completed some analyses of new meteorites, partly prepared the manuscripts, maintained the general index of new meteorites, and spent considerable time indexing and proofreading a monograph by Dr. Stuart H. Perry, which now forms Bulletin 184 of the U. S. National Museum. Various determinations were made on the sublimates of the Parícutin volcano, and a series of analyses now under way should be completed within the coming year.

Before his untimely death Dr. Charles E. Resser was engaged in the study of the Lower Ordovician trilobites of Vermont and adjacent areas and was continuing his Cambrian Summary and Bibliography.

Many years of work by Drs. Walcott and Resser have gone into this Summary and Bibliography, both of which when finished will be valuable contributions to science.

The researches of the head curator have been limited to three projects: first, his monographic study of Lower Paleozoic corals, second, a paper on the giant Paleozoic Ostracoda known as the Leperditiidae; and third, a continuation of researches on American Ordovician crinoids and cystids contained in the Springer collection. The manuscript and illustrations of all three have been more than half completed.

Dr. G. A. Cooper completed his study of the Devonian of Illinois in collaboration with Dr. A. S. Warthin. This project resulted in the preparation of two manuscripts, one dealing with the subsurface stratigraphy of the Devonian, the other being a more detailed and extensive piece of work. The preparation of the Paleozoic fossils from Sonora, Mexico, in connection with a manuscript describing the geology and paleontology of the Caborca area in Sonora has been Dr. Cooper's major task during the year when in the office. In odd moments he has proceeded with the monograph on "Chazyan and Related Brachiopods" to such effect that 114 of the 130 plates are now mounted and numbered.

Dr. T. Wayland Vaughan, associate in paleontology, has been occupied with the Cenozoic corals and the larger Foraminifera and has cared for the study collections of these two groups of fossils, of which he is the leading authority.

As in the past, members of the Geological Survey with offices in the Museum building have continued, in the course of their professional duties, to employ our collections in their researches.

Dr. Charles Butts is completing his volume on the geology of the Appalachian Valley of northern Virginia and has been checking the fossil collections made in the course of his study. Dr. J. B. Reeside, Jr., has almost finished the identification of a large collection of Triassic fossils made in Sonora by Dr. Cooper and two collaborating geologists. Dr. R. W. Imlay has made further progress in his studies of Jurassic and Cretaceous fossils from the western United States, Mexico, and Venezuela. Dr. H. E. Vokes is carrying on part time research on Mesozoic and Cenozoic pelecypods. Dr. L. W. Stephenson is completing his manuscript on the fauna of the Lewisville beds of the Texas Cretaceous which represents some years of work on the subject. Dr. Edwin Kirk is now occupied with Devonian and Carboniferous crinoids and has several papers in preparation. L. G. Henbest is progressing with his work on fossil Foraminifera and caring for the collections thereof. Dr. R. W. Brown has nearly finished his description of the Paleocene (Fort Union) flora which has a significant bearing on the determination of the Mesozoic-Cenozoic boundary. Dr. C. Wythe Cooke, in connection with a volume on the geology of Florida, has studied the Cenozoic fossils, especially the echinoids.

Curator C. W. Gilmore completed and submitted for publication three manuscripts, entitled "A New Sauropod Dinosaur from the Upper Cretaceous of Missouri," in collaboration with Dan Stewart; "A New Amphisbaenid Lizard from Wyoming," in collaboration with Dr. Glenn L. Jepsen; and "A Slab of Fossil Turtles from the Eocene

of Wyoming, with Notes on the Genus *Echmatemys*." All these have been accepted for publication by various scientific journals. A manuscript describing a new species of carnivorous dinosaur from the Upper Cretaceous of Montana, based on a skull belonging to the Cleveland Museum of Natural History, is practically completed.

Geological material received for examination and report through official channels numbered 143 lots for the department, distributed as follows: General geology, 55; mineralogy and petrology, 69; invertebrate paleontology and paleobotany, 16; vertebrate paleontology, 7. Many of these consisted of large numbers of specimens requiring considerable time and study for their identification, and in addition numerous specimens were brought in person for firsthand determinations. There were 245 letters requesting information of geological nature referred to the divisions as follows: General geology, 84; mineralogy and petrology, 115; invertebrate paleontology and paleobotany, 26; vertebrate paleontology, 20.

DISTRIBUTION AND EXCHANGE OF SPECIMENS

The distribution of geological materials to various educational and research institutions, other Government departments and war agencies, and to individuals engaged upon scientific investigations was as follows: Gifts, 1,812 specimens; exchanges, 116 specimens; loans for study, 569 specimens; and transfers, 36 specimens.

Most of the gifts were collections sent to schools and colleges and scientific institutions, including a considerable one of Cambrian fossils and trilobites to the Geological Institute of Mexico, and another of 158 minerals and rocks to the Institute of Jamaica at Kingston.

NUMBER OF SPECIMENS UNDER DEPARTMENT

The total number of specimens for the three divisions as given below is necessarily only an approximate estimate. It is computed by adding to the figures given last year the difference between the number of specimens received and those sent out.

Mineralogy and petrology	256,431
Invertebrate paleontology and paleobotany	2,401,250
Vertebrate paleontology	29,448
Total	2,687,129

DEPARTMENT OF ENGINEERING AND INDUSTRIES

(CARL W. MITMAN, *Head Curator*)

ALTHOUGH the department was compelled to carry on its work this year with a less experienced and smaller staff than it has had in recent years, the collections in its charge were maintained. The work was accomplished, however, only by devoting less time and attention than usual to other essential activities. New accessions, for example, were 25 percent less than the average of the past five years; there was little effort made to acquire additions to the collections; scientific work was cut to a minimum; and new exhibition planning was abandoned. Little change in this situation can be expected until the war is ended and experienced professional personnel again becomes available.

A major change in organization, affecting other branches of the Museum as well as this department, was made on November 8, 1943. For many years the Museum's chief photographer served also as associate curator of the photographic section of this department's division of graphic arts. The increased attention required by the photographic collections and library in recent years, however, made it almost impossible for one man to carry on both activities. Accordingly, on the date mentioned, the associate curator was relieved of all duties concerned with the Museum's photographic laboratory.

A number of changes in the staff took place during the year. On July 12, 1943, Joseph W. Schutz, assistant curator, section of chemical industries, resigned to accept a position in the consular service of the State Department. Two members of the staff, Dr. A. J. Olmsted, associate curator, section of photography, and Dr. F. L. Lewton, curator, division of crafts and industries, retired on account of age on September 30, 1943, and March 31, 1944, respectively. In view of the manpower shortage because of the war both men were reappointed to their respective positions the day following their retirement. After many years of expert service as senior scientific aide, section of textiles, Mrs. Elizabeth W. Rosson was advanced on May 12, 1944, to assistant curator in that section.

In May 1944, at its own request, the Smithsonian War Committee, of which the head curator, Carl W. Mitman, was chairman, having accomplished in the two years of its existence all that it was organized to do, was dissolved by the Secretary. While thus relieved of one special assignment, Mr. Mitman continued to direct during the year the protective and custodial services established for the irreplaceable Museum collections stored outside of Washington.

ACCESSIONS

Accessions for the year totaled 164, comprising 1,388 specimens. This is a decrease of 52 accessions and 878 specimens compared with the previous year. The accessions were distributed as follows:

Engineering, 31 (87 specimens); crafts and industries, 62 (1,002 specimens); and graphic arts 71 (299 specimens). Of these the following are worthy of special mention:

Engineering.—From the viewpoints both of historical merit and of popular appeal, the acquisition of two automobiles holds first honors in the group of accessions in this division. One of these was a U. S. Army truck, one-quarter ton, 4 x 4, universally called a "jeep," and having the unique distinction of being the prototype of these famous World War II vehicles. Specifically the truck is one of the first series of 62 similar vehicles built in 1940 by the American Bantam Car Co. and later standardized and adopted by the Army for volume production. It was received by transfer from the War Department through Col. E. S. Van Deusen. The other automobile, now a part of the Museum's unique collection, is a Winton, 1903, and the first automobile to be driven across the United States. This historic journey from San Francisco to New York, requiring 63 days on the road, was made by H. Nelson Jackson, owner, Sewall K. Crocker, and a bulldog, "Bud," between May 23 and July 26, 1903. After preserving the car for over 40 years Colonel Jackson presented it to the Museum together with all the existing camping and touring equipment and spare parts carried along. He generously presented too his complete file of contemporaneous newspaper and periodical accounts of the trip.

The Museum's watercraft collections were materially enhanced by four valuable gifts. President Roosevelt presented through Ralph E. Cropley an original, kerosene-burning, brass-bulkhead lantern of the first S. S. *Mauretania*, 1907–1935. The lantern had been part of the furnishings of the first-class passenger lobby and now stands in the exhibition case with a handsome model of this famous vessel presented to the Museum by President Roosevelt some years ago. The marine department of the Cleveland-Cliffs Iron Co., with the cooperation of Comdr. W. M. Connelly, presented a beautifully made model of the Great Lakes steamer *William G. Mather*. Ore- and freight-carrying vessels of our great inland lakes were not represented in the Museum's collection, and so a model of this famous and typical vessel of its class is a most welcome and valuable acquisition. Through the interest of Philip A. Sawyer there were acquired two original builders' block models of sponge and shrimp boats respectively of the types used by the Tarpon Springs, Fla., fishermen. Many vessels have been built from these models in the past 40 years, the sponge boat being the design of Leonardis Paskalitis and the shrimp boat of Minas and Antonius Sarris. An interesting cooperative activity instituted by the department resulted in the acquisition of a model of the Chesapeake Bay skipjack *Carrie E. Price*. The plans of this vessel are an item of the Historic American Merchant Marine Survey maintained by the division. With these plans and with some material assistance rendered by the division's technicians, William E. Lee, president of the Washington Ship Model Society, constructed the model and presented it to the Museum.

To the division's extensive collections on power generation there was presented by the Peabody Engineering Corporation a full-size, sectionalized combination oil and gas burner such as is widely used for steam generation in power plants. The burner was invented and developed by Ernest H. Peabody in the early 1920's and is so de-

signed that in case of failure of one fuel the other may be instantly applied. A series of photographs of typical installations of batteries of these burners, together with a sectioned burner nozzle, augment the burner itself and provide a rounded-out educational exhibit of this important part of modern power-plant equipment. A unique exhibit illustrating improvements over the years in rotary rock bits used throughout the world in drilling for oil was presented by the Hughes Tool Co. Five original bits dating from 1909 to 1942 standing in holes drilled in a slab of rock give the visitor the opportunity not only to see what the improvements have been but also to understand the rock-cutting action and principle of the rotary drill. The bits and rock slab mounted before a background picturing a crowded oilfield together compose an attractive addition to the mineral technology exhibits of the division.

Other interesting additions to the collections were: 2 cabinetmakers' miter jigs and a hand-operated turning saw, presented by William H. Egberts and Mrs. Lloyd R. Hayes, respectively; 25 miniature internal combustion engines used in flying model aircraft, lent by Capt. J. J. Hanson; a small pocket type calculator, "Groesbeck's Calculating Machine," donated by Lt. John P. Roberts, U. S. N. R.; and a collection of over 200 photographic negatives of early automobiles presented by E. B. Blakely.

Crafts and industries.—The outstanding accession in the textile section was a group of specimens illustrating late developments in war textiles, exemplified by fabrics of cotton-backed, viscose twill, and "Sunbak," a wool-backed, viscose rayon interlining, designed especially for uniforms of the Army Air Forces. The applications of these fabrics are shown in two types of electrically heated flying suits, one worn under regulation garments, together with auxiliary equipment. Included in this group is an aviator's flotation suit made of "Tackle Twill," a strong, rayon and cotton fabric. A supplemental exhibit consists of parts of an F–2 type suit showing the electric-wire interlinings and inserts. The acquisition of these materials and their unique presentation were made possible by the joint cooperation of William Skinner & Sons and the General Electric Co. A coil of nylon rope similar to that now being used by the Army Air Forces for towing gliders and representing another of the diverse uses of this synthetic fiber, was lent by the Plymouth Cordage Co. Modern blended-yarn dress goods, made of various combinations of rayons with aralac (a casein product), and wool, were received from J. P. Stevens & Co. The Cotton-Textile Institute continued its cooperation by supplying specimens of representative cotton fabrics made for the spring and summer of 1944. Recent types of special wire coils, produced by automatic winding machines, were furnished by the Universal Winding Co. to supplement their standard windings of previous years.

Through the courtesy of Mrs. Margaret Hayden Rorke, secretary and managing director of the Textile Color Card Association of the United States, the section received the Ninth Edition of the Standard Color Card with its supplements, the United States Arms and Services Color Card, and the United States Army Standard Thread Card. The Association is supported by textile manufacturers and representative firms of almost every industry using color. These firms agree to have their products match the colors included in the official standard card,

resulting in a great saving of time to consumers in obtaining exact shades of colors in materials which are to be used together. This standardization is especially valuable to the United States Arms and Services, each service having an official color requirement for its uniforms, trimmings, badges, and similar equipment. The Standard Thread Card is furnished by the Quartermaster General's Office to quartermaster depots and contractors making clothing or equipage for the United States Army. The Standard Ninth Edition Color Card showing 216 shades is not only of value to all color-using industries, but also of service as a standard reference for schools, colleges, libraries, advertising firms, printers, and publishers.

Noteworthy gifts to the homecraft textile collections included the following: An 1833 counterpane woven in "Double Bowknot" pattern, from Mrs. Lucy Holder Pratt; 2 jacquard type coverlets, one bearing the American eagle mark of Harry Tyler, 1845, from Miss Clara R. Walker; 3 hand-woven coverlets, from the estate of Miss Rebecca E. Everly; an antebellum autograph quilt, pieced in silk hexagon-patch pattern, and signed by President Lincoln and officers of the U. S. Army, from Mrs. Mary Alice Hughes Lord; and an appliqued cotton quilt and a coverlet, from Miss Margaret A. R. Stottlemeyer. The collection of early colonial implements, used in household textile industries, was enhanced by a flax hetchel, dated 1739, a gift from Edmund U. Barley, and by a hardwood, umbrella-type swift, used for rereeling skeins of yarn, presented by Mrs. Harry L. Watson.

An important accession in the section of chemical industries was an exhibit from Rayonier Inc., illustrating the chemistry and applications of refined alpha-cellulose derived from wood pulp. Since the military services' requirements for ordnance purposes cover practically all the annual production of cotton linters, the manufacturers of rayon found it necessary to turn to alpha-cellulose for their raw material. The applications of the wood-pulp cellulose shown in the exhibit include rayon, molded and laminated plastics, cellophane, artificial leather, rayon tire cord fabric, and electric-arc welding rods. An exhibit illustrating the manufacture of urea formaldehyde and melamine compound plastic resins and their applications to molding, gluing, bonding, or coating purposes was received from the Plaskon Division of the Libby-Owens-Ford Glass Co. Vice President Henry A. Wallace presented the Museum with two robes made from strips of vicuña skin. The robes were presented to him by Srta. Rosa Prado, daughter of the President of Peru, on the occasion of his good-will tour to South America in May 1943. These examples of the lovely, soft, furlike covering of this rare animal were added to the collection of commercial furs.

A noteworthy accession in the section of woods and wood technology was a collection of 169 specimens of woods of Costa Rica, Panama, and Ecuador received from the U. S. Forest Products Laboratory. The collection was made in 1943 by members of the U. S. Forest Service in connection with the Latin American Forest Resources Project of the Department of Agriculture, sponsored by the Coordinator of Inter-American Affairs. Dr. G. W. Harley, Ganta Mission, Liberia, presented 42 finished specimens of hardwoods of that country, which are valuable additions to our collections. A fine set of 12 commercial woods of Cuba was transferred to the section by the Lumber and

Lumber Products Division of the War Production Board. Continuing its cooperation, the Navy Department transferred to the Museum samples of eight woods which had been recommended for use in building yards, docks, and ships. For exhibition, the Geo. W. McGuire Co. presented three lawn rakes made of white oak, and other native hardwoods, which they had developed as substitutes for the once-popular bamboo rakes of Japanese origin. The Handle & Excelsior Co. contributed specimens of wooden brush and shovel handles, and two all-wood rakes showing what can be done to conserve critical metals in the manufacture of these products.

In the division of medicine and public health the most valuable items were added to the section of pharmacy. These included a complete exhibit, a gift of Sharp & Dohme, Inc., illustrating the manufacture and use of dried blood plasma now effectively employed by our armed forces; from E. R. Squibb & Sons, a series of objects picturing the method of obtaining penicillin, a recently discovered miracle-performing bacterio-static drug; and a collection outlining the life history of Carl Wilhelm Scheele, the internationally famous apothecary, donated by Dr. George Urdang. Objects of importance added to the history of medicine section were the first portable X-ray machine known to have been operated successfully on a battlefield, from Dr. John Hunter Selby; the saddlebags of Dr. George M. Shafer, U. S. Army, an Ohio practitioner, from Minnie M. Shafer; a localizer, penetrometer, Buckey diaphragm, old-type interrupters, radiometer, tintometer, and other historical specimens utilized in the early application of X-rays as a therapeutic agent, from Dr. John Hunter Selby. The most valuable additions to the section of public health were a collection of materials illustrating dentistry and oral hygiene, and a series of 12 life-size models of normal and abnormal human hearts, gifts, respectively, of the American Dental Association and the American Heart Association, Inc.

Graphic arts.—The outstanding accession in the section of graphic arts was a French color print of the eighteenth century, "L'Amant Surpris," by C. M. Descourtis after F. Schall. This type of print, the *estampe galante*, is highly prized and much sought after by collectors. Descourtis was one of the important engravers of the period, and it is said that "L'Amant Surpris" is one of his masterpieces. Miss Mary Louise Carr was the donor. Walter Tittle, a well-known drypoint artist, presented the section with 19 examples of his work, following his special exhibition in the Museum in October-November 1943. Mr. Tittle's handsome gift included portraits of distinguished people, among them George Bernard Shaw, Jean Louis Forain, Arnold Bennett, and Aristide Briand. Three prints by the late Jerome Myers were the gift of Dr. Harry H. Shapiro through Mrs. Jerome Myers. One of the best-known artists of his generation in America, Myers dealt with humble themes revolving about his beloved Manhattan—city scenes, children at play, itinerant peddlers, and similar subjects. His prints and paintings are in more than a score of museums throughout the country. The gift included two self-portraits (a lithograph and an etching) and an etching in color depicting children in a park.

Commercial and reproductive wood engravings of the last quarter of the nineteenth century in America are common enough, but wood engravings which were both designed and executed by the artist are quite rare. Still more rare are the engraved blocks themselves. Mrs. Minerva C. Cleaves donated nine engraved blocks and two prints

made by her late husband, W. P. Cleaves, who engraved from his own designs. While Cleaves was not widely known he was an extremely able artist and a sensitive craftsman. His work is a desirable addition to our collection of American wood engraving of that flourishing period, the last quarter of the nineteenth century. VOKS, the Soviet Russian Society for Cultural Relations with Foreign Countries, gave the section six war posters produced by the hand-stencil process. No printing equipment is necessary in making posters of this kind, which the Russians have developed to a high degree. Guerrilla artists have used this method extensively in occupied territories where the absence of printing and transportation facilities practically eliminate other methods. Miss Zulema Barcons presented four block-prints, technical variations of the same subject, "Andromeda." Three of these prints are the result of new and original techniques, the fourth version being the typical "white line" linoleum engraving.

A fine old Dutch book, "Historisch Sterf-Huys door Franciscus Ridderus," printed by Joannes Borstius in 1668, was presented by Bert Bille. Among the interesting features of this book is the combination of Gothic and Roman type and the sturdy, original parchment binding. An example of fine printing, "Prelum to Albion," was the gift of the author and printer, Jackson Burke. This book, printed by hand on a hand press, is a history of the development of the hand press from the adaptation of the prelum, or winepress, to the "Albion," one of the latest and most widely used presses of the days before power.

Among other accessions of importance was a series of ten progressive proofs as well as the seven original zinc plates which were used in printing a most unusual 7-color job in offset-lithography. The original, a water-color by Dwight C. Shepler, was reproduced with astonishing fidelity. This accession was the gift of the Independent Lithograph Co. "Washington Crossing the Delaware," a steel engraving by P. Girardet after the painting by E. Leutze, was the gift of L. C. Herring; "The Holy Sepulchre," a Currier and Ives lithograph, was presented by Dr. B. O. A. Thomas; "Stony Pasture," an etching by Luigi Lucioni was an associate member's print of the Society of American Etchers; eight etchings by Theodore Bolton of New York, the well-known writer on early American art, were the gift of the artist; and one facsimile of an old newspaper, "Gazette Litteraire Pour la Ville & District de Montreal. Mercredi, 17 Fevrier, 1779," was presented by the Gazette Printing Co. Fleury Mesplet, who founded and edited the newspaper, was secretly appointed by the Continental Congress in 1776 to set up a press in Canada to propagandize against the Crown. This newspaper was his vehicle.

The most important accession received by the section of photography was William J. Nagel's gift of a set of rectilinear lenses made by E. Francais, Paris, France. Singly and in combination the set provides nine focal lengths from 5¼ to 16 inches, covering angles from 50° to 90° with plate sizes from 3¼ by 4¼ to 10 by 12 inches. The Brenner Photo Co. indicated its continuing interest in the collection by a number of gifts. Included were an Agfa flash lamp, an oil-burning dark-room lamp; a Pathex motion-picture camera, an Irwin movie camera, a Wizard lens, and a Weno Hawk-eye camera. George W. Harris, a student of the history of photography, presented 53 items, including an album, a stereoscope, and 51 daguerreotype and ambrotype portraits all in very fine condition. Miss Cora Marshall presented

the section with a family heirloom in the form of a gold locket containing two tintypes, while Ransom Matthews presented 11 specimens of historical motion-picture film.

Other interesting specimens added to the photographic collections were: A No. 1 Panoram Kodak of 1894 presented by Miss Jackie Martin; an early 16-mm. motion-picture camera manufactured by De Vry, donated by Harry H. Olmsted; an early pocket Kodak, model of 1896, from Dr. A. J. Olmsted; and a Lauers patent revolving photograph cabinet, used about 1870, together with a 30 by 30 inches curtain slide plate holder used on an eclipse expedition in 1900 at Wadesboro, N. C., deposited by the Smithsonian Institution. Pictorial photographs for the permanent collection were received from Edward F. Raynolds, Eleanor Parke Custis, and the Smithsonian Institution, while an Agfa color plate with a color reproduction was presented by the color specialist Rex Soice.

INSTALLATION AND PRESERVATION OF COLLECTIONS

Additions to the collections of this department fall within one or the other of two general classes—exhibition and study. They are of innumerable categories and must be incorporated with the older objects of their particular class. Accordingly, with the inflexible areas available to the department, the first major curatorial task year after year is that of properly accommodating two specimens in an area formerly occupied by one. The second major task is guarding the collections against destructive agents—sunlight, air conditions, dust, water, insects, and vermin. These two tasks consume fully 75 percent of the time allotted for the conduct of this important function of the department. Examples of the variety of work performed during the year are as follows:

Engineering.—Progress continues to be made in improving the appearance of the exhibits, especially those contained in the Aircraft Building. Many hours of hard labor on the part of the staff were necessary to produce this result. Better arrangement of the stored material in the Aircraft Building was effected through the acquisition of a lot of standard quarter-unit storage cabinets. All the exhibition cases in the transportation hall of the Arts and Industries Building were cleaned and also some of those in the power hall. This involved the removal of all the specimens, cleaning them, and washing the cases and glass. Many of the quarter units in the various rooms were rearranged and the study material replaced for more efficient use. Work continued on the cataloging and classification of the collection of prints presented last year by the Baltimore & Ohio Railroad. Twice during the year all the cases containing fabrics, as well as specimens parts of which are of textile material, were treated with fumigants.

Several reinstallations of exhibits were made during the year in the boat hall, and one diorama of a primitive oil refinery was completed in the engineering laboratory and placed on exhibition in the fuel court.

Crafts and industries.—Seventeen new installations and 47 rearrangements of the textile collections were made, and six additional cases were added during the year. The most impressive installation was one composed of war textiles in which the uniforms of the Army Air Forces were shown on lay figures. Against a colorful curtain "sky-

drop" and illuminated by fluorescent lights, it attracts the attention of all visitors. In the south hall, cotton fabrics and blended rayon dress goods were pleasingly exhibited. The series representing ornamentation of cotton fabrics by printing was improved through an exchange of cases, which also enlarged the storage space. Four additional cases were placed in the space allotted to homecraft textiles in the east south range, one for shell-work, another for unusual handmade rugs, and the other two for historical quilts. Specimens for the coverlet collection were installed, and necessary changes were made to preserve the scheme of classification. Textile implements, removed from the south hall, were placed in the large wall case containing the series illustrating the preparation of homespun cotton, wool, and linen yarns. The east end of the east south range gallery was opened and utilized for such items as tapestry loom models and work samples. The resulting space has facilitated passage through the building and has improved the entire gallery.

During the year all exhibition cases in the wood court were washed inside and out. This necessitated the removal and reinstallation of 10 exhibits containing hundreds of specimens. Where necessary, new labels were printed and some material was rearranged. Very little progress was made with the study collection in cutting woods to size for convenient handling. Of the 323 added this year, 110 were either received in or have been cut to proper size; 213 remain to be cut. In the course of identifying woods for war agencies, however, a number of unidentified specimens in the collection were classified and entered in the generic index.

To provide exhibition space for two vicuña-skin robes it was necessary to reinstall three cases. These were in the fur series and included the Alaskan sealskins and the processed rabbit and muskrat skins. The change added to the attractiveness of the specimens as well as to the alcove in which the exhibits of furs are shown on the south gallery. To make available two cases for the installation of the new specimens of plastics and rayon received from the Libby-Owens-Ford Glass Co. and Rayonier Inc. the exhibit of wood-pulp alpha-cellulose from Brown Co. and some of the chemical applications of cotton cellulose from E. I. du Pont de Nemours & Co. were retired. In the rubber section the case of reclaimed rubber and the two cases showing commercial forms of crude rubber were reinstalled. New bases were supplied for the bulletproof inner tube case and the rubber half-track for Army scout cars.

The principal work in the history of medicine section of the division of medicine and public health was the reinstallation of several cases to make possible the acceptance of a collection of apparatus relating to the early history of X-rays as a therapeutic agent, and to place the iron lung in the history of medicine line where it belongs. In the section of public health the dental diorama which had been in use for years was removed and a new unit installed in its place. The materials used in an exhibit devoted to heart disease were renewed. These include four small scenes showing the effect of preventable conditions which injure the heart, a series of 12 life-size models of the human heart in health and disease, vital statistics, and drawings illustrating the anatomy of the heart and the circulation of the blood. The work in the section of materia medica was directed toward obtaining necessary additions and replacing deteriorated specimens.

The drug and pharmaceutical materials were carefully checked, and specimens which had deteriorated were removed and replaced with fresh examples. The dioramas, exhibits, and models were cleaned, repainted, and altered to keep all parts of them up to date.

In addition to these various classes of work connected with the preservation of the collections, periodic fumigation of textiles and animal products was made.

Graphic arts.—The thorough cleaning and complete painting of the two principal exhibition halls in the Smithsonian Building assigned to the section of graphic arts necessitated first the protection in place of all exhibits. Upon completion of the painting and removal of scaffolds every exhibit had to be cleaned and rearranged before the halls were opened to visitors. Another major undertaking was the removal of all stored specimens from 34 wall cases in the chapel to allow for painting and carpentry work and the cleaning and replacement of these specimens following the completion of the work. A third piece of important work was the labeling and matting of the collection of twentieth-century American prints and their placement in 11 new solander storage cases for better protection.

The section of photography in the Arts and Industries Building made no changes in the arrangement of the exhibited collections. The establishment of the new office, library, storage and workroom of the section proved an arduous and long-drawn-out task. This involved the moving and rearrangement of all collections stored in the photographic laboratory and or the east-south range gallery as well as approximately 300 running feet of books comprising the photographic library.

In addition to these various activities the department arranged for and prepared the following special exhibitions during the year:

ENGINEERING

November: Paintings by Philip A. Sawyer, "Florida Sponge and Shrimp Boats."
January: Annual Exhibition Washington Ship Model Society.
February: Edison Day, "Inventions of Thomas Alva Edison."
April: Annual Exhibition, Metropolitan Society of Model Engineers.
May: Morse Centennial, "One Hundred Years of the Telegraph, 1844–1944."

GRAPHIC ARTS

July: 36 contemporary prints selected from the collections of the division of graphic arts.
August: 39 early American military prints on sheet music lent by the Misses McDevitt and Wright, Washington, D. C.
September: 35 prints by Jerome Myers, special memorial exhibit lent by Mrs. Jerome Myers, New York City.
October: 40 block prints by Zulema Barcons, New York City.
November: 42 drypoints and 1 etching by Walter Tittle, Danbury, Conn.
December: 48 etchings by Hans Kleiber, Dayton, Wyo.
January: 36 etchings by Cornelis Botke, Santa Paula, Calif.
February: 16 etchings and 19 drawings by Helen A. Loggie, Bellingham, Wash.
March: 40 etchings by Luigi Lucioni, New York City.
April: 17 lithographs, 20 drawings, and 5 illustrations by Ben Messick, Los Angeles, Calif.
May: 35 prints by 35 artists, selected from the collection of the division of graphic arts.
June: 18 Chinese watercolors from the collection of the division of graphic arts.

PHOTOGRAPHY

September: 43 pictorial photographs by Rowena Fruth, Connersville, Ind.
September: 145 pictorial photographs by members of the National Photographic Society, Washington, D. C.
October: 34 pictorial photographs by Frank A. Noftsinger, Roanoke, Va.
November: 50 pictorial photographs by Charles S. Martz, Aurora, Mo.
December: 51 pictorial photographs by members of the Camera Club, New York City.
January: 100 pictorial photographs by members of the Metropolitan Camera Club Council, Rockville Center, N. Y.
February: 75 pictorial photographs, the original of the plates shown in the "American Annual of Photography, 1944," lent by the American Publishing Co., Boston, Mass.
March: 44 pictorial photographs by Arthur Hammond, Boston, Mass.
April: 71 prints, pictorial photographs by Edward C. Crossett, Wianno, Mass.
May: 28 pictorial photographs by David Darvas, Cleveland, Ohio.
June: 36 pictorial photographs by Hans Kaden, Jenkintown, Pa.

INVESTIGATION AND RESEARCH

Research was a daily requirement of the staff in order to furnish information to correspondents, Government bureaus, war agencies, and students and to identify materials forwarded to the Museum for identification. In addition specific and continuing research studies of several members of the staff were pursued as opportunities appeared.

Assistance to outside investigators was likewise a daily activity and was generally of two sorts—aid in the study of specific objects in the collections and pertinent literature and loans of materials for outside use. Examples of the first type of assistance rendered during the year are: Studies of certain woods and literature for a paper on "Uses of Wood in the Household during Colonial Days"; studies of the materia medica collections in connection with the development of a private museum; and studies of high-altitude flying oxygen apparatus in the collections in connection with a private research problem. Of the second type examples are: Preparing and furnishing 20 sets of important Latin American woods for traveling school exhibits; furnishing samples of cactus fiber for wicker furniture; preservation of a blood-stained Japanese flag; compiling an outline of waxwork technique; preservation of old linens; furnishing information on the kind of grinding faces used on millstones; on early methods of felt hat making; on brazil wood as a source of dye; on physical properties of woods suitable for archery; on identity of "perfume nuts," on the origin of the "jeep"; and on the history of the electric motor. It is estimated that 1,000 requests of this nature received attention in the department during the year.

DISTRIBUTION AND EXCHANGE OF SPECIMENS

Materials distributed from the department, including specimens, photographs, and prints, totaled a little over 3,000 items, or 1,000 less than during the preceding year. Almost nine-tenths of these are contained in the seven traveling exhibits of the graphic arts. These were on circuit throughout the year in 15 states. A total of 171 loans and gifts were made to educational institutions for exhibitions and experimental purposes and 305 items were transferred to other Government bureaus. During the year, too, 457 copies, over twice that of the previous year, of drawings and photographs contained in the Historic American Merchant Marine Survey maintained in the division

of engineering were furnished to private purchasers. This brings the total of such material distributed since the completion of the survey in 1938 to 3,979 copies.

NUMBER OF SPECIMENS UNDER DEPARTMENT

Engineering	17,465
Textiles	15,904
Woods and wood technology	13,369
Chemical industries	23,216
Agricultural industries, including foods	2,233
Medicine and public health	20,058
Graphic arts, including photography	47,175
Total	139,420

DIVISION OF HISTORY

(THEODORE T. BELOTE, *Curator*)

THE past year was one of considerable activity for the division of history. The attention of the various members of the staff was directed toward several important projects, among them the reinstallation of the permanent exhibits located in the north and west halls, the improvement of the status of the storage collection, the installation of a number of temporary exhibits, and the rearrangement of the records and sectional library.

Much assistance was given in answering inquiries concerning the military and other collections.

The position of clerk-stenographer, held at the beginning of the fiscal year 1943 by Miss Virginia Galt, was abolished when Miss Galt resigned. A new position was created, that of scientific aide, and Miss Margaret W. Brown was appointed in December 1943. Under this new arrangement the work of the division was considerably advanced.

ACCESSIONS

The number of accessions received was 57. Individual specimens totaled 4,388, which was 2,485 more than for the previous year.

The collection of United States flags of historic interest was increased by two bunting flags of the period of the Civil War. One of these, presented to the Museum by Miss Grace D. Baylies, bears 34 stars arranged in the form of a large diagonal cross, with 4 stars arranged in a square in each angle of the cross. The other, presented by Miss Laura R. Little, has 36 stars arranged in 6 rows of 6 stars each.

The collection of civil, naval, marine, and military medals and decorations was increased by specimens of several awards of these types established during the present war. Among these were:

Specimens of the Air Medal, transferred to the Museum from the War and Navy Departments. This medal was established by Executive Order, May 11, 1942, for award to members of the armed forces of the United States who have distinguished themselves since September 3, 1939, by meritorious achievement in flight. It is second only to the Distinguished Flying Cross. It bears on the obverse a bronze compass rose suspended by a pointer and charged with an eagle flying downward to the left carrying thunderbolts.

Specimens of the decorations representing the four degrees of the Legion of Merit, namely, Chief Commander, Commander, Officer, and Legionnaire—received from the War and Navy Departments. These decorations were created by Act of Congress of July 20, 1942, for award to the personnel of the armed forces of friendly foreign nations and the personnel of armed forces of the United States and the Philippines. The recipients must have distinguished themselves by exceptionally meritorious conduct in the performance of outstanding services since the Presidential proclamation of emergency,

September 8, 1939. These decorations are the first to be founded by the United States Government for award to foreigners. The basic design is a 5-armed, double-pointed star of white enamel bordered with red, each angle of which bears two crossed arrows pointing toward the outer part of the star. The center of the star bears a gold medallion with a blue enamel center on which appear 13 5-pointed white stars arranged in the following manner: 1, 4, 3, 4, 1. The star is superimposed on a narrow wreath of laurel. The reverse of the medallion bears the legend "Annuit Coeptis," or "He [God] has favored our undertakings," this being the legend on the reverse of the Great Seal of the United States, the design of which was adopted in 1782. The reverse side of the laurel wreath, which is plain, bears the legend "United States of America."

Specimens of the Merchant Marine Distinguished Service Medal and the Mariner's Medal—received from the War Shipping Administration. The first of these, the Merchant Marine Distinguished Service Medal, was established by Joint Resolution of Congress, April 11, 1943, for award to any person in the American Merchant Marine who on or after September 3, 1939, "has distinguished himself . . . in the line of duty." The obverse of this medal bears a silver compass rose imposed on a compass card; the medal depends from a small eagle standing before two crossed anchors surmounted by a floral arch. The reverse bears a disk with the United States shield in the center surrounded by the legend "Distinguished Service, United States Merchant Marine." The Mariner's Medal is awarded to any seaman who, while serving on a ship during the war period, is wounded, suffers physical injury, or suffers through dangerous exposure as the result of an act of an enemy of the United States. Should any such seaman die from the wounds or injuries before the award can be made to him, the medal may be presented to the person named in the war-risk policy as his beneficiary. The medal consists of an 8-pointed bronze star upon which is superimposed a silver disk bearing an eagle standing on an anchor.

The collection of uniforms was increased by the addition of several United States Army and United States Military Academy uniforms of the early part of the twentieth century. These were presented by D. M. Lynn. Uniforms of the types worn by Army nurses and officers and members of the Women's Army Corps were received from the War Department. A series of German and Japanese uniforms captured in Italy and the Aleutian Islands was received as a loan from the War Department.

Interesting specimens added to the collection of coins and medals included a series of United States cents, nickels, dimes, quarters, and half-dollars struck at the Denver, Philadelphia, and San Francisco mints in 1943. These coins were transferred to the Museum from the Treasury Department. Interesting coins and medals were presented during the past year by the Honorable Frederic A. Delano as additions to the large and valuable series of such objects presented to the Museum by him during the previous fiscal year.

From Col. Hans Lagerloef was received as a gift a magnificent collection of Aguinaldo (Philippine) stamps totaling more than 2,000 specimens. A cover franked with a 2-cent red Aguinaldo stamp postmarked Bataan, a locality famous for the valiant fight against the

Japanese of the American forces under the leadership of Gen. Douglas MacArthur, is included.

The Post Office Department transferred about 1,500 stamps issued during the past year by the United States and foreign countries. Among these was a special series of 12 United States stamps commemorating countries that have been overrun and occupied by the Axis powers—Albania, Austria, Belgium, Czechoslovakia, Denmark, France, Greece, Luxembourg, Norway, The Netherlands, Poland, and Yugoslavia. Each stamp bears in color the national flag of the country concerned.

From the Postal Administration of Great Britain, through the U. S. Post Office Department, were received stamps of the Bahamas, Barbados, British Honduras, Malta, Newfoundland, Southern Rhodesia, and Tonga. Stamps issued for prepayment of postage on Jugoslavian warships and merchant vessels were presented by the Jugoslavian Government in exile in England also through the U. S. Post Office Department. The Soviet Union produced a 30-kopeck and a 3-ruble stamp showing the Russian, British, and American flags, commemorating the recent historic conference at Teheran. Among the stamps emanating from enemy countries that found their way into the Museum collections were two Japanese stamps commemorating the fall of Bataan and Corregidor, 11 stamps issued by the Japanese military authorities for use in the occupation of the Dutch Indies, and 14 varieties of Japanese stamps for the army of occupation in the Philippine Islands. A large number of German stamps also were received.

In all, 3,846 philatelic specimens were received during the year.

INSTALLATION AND PRESERVATION OF COLLECTIONS

Exhibition work has been of special interest to the public owing to the large amount of civil, military, and naval materials included in the collections.

The most notable new exhibit installed by the division during the year was a series of United States naval and military medals and decorations of the types awarded by the United States War and Navy Departments during the period from the Civil War to the present war, illustrating the general development of such decorations during the period mentioned. Of special interest are the medals and decorations established during the present war, such as the Air Medal, the Legion of Merit Decorations, the Mariner's Medal, and the Merchant Marine Distinguished Service Medal. This exhibit was placed in the rotunda of the Arts and Industries Building.

Progress was made during the year in the installation of a series of civil relics and antiques in the west hall. Although the project was not completed, because of the lack of suitable exhibition cases, the general arrangement of the hall has, nevertheless, been much improved.

Several special exhibits were installed by the staff during the year, among them the following: Medals and firearms for the inspection of the Regents of the Smithsonian Institution on the occasion of the annual meeting of the Board of Regents in January 1944; relics of Samuel F. B. Morse, lent to the department of engineering for a special exhibition of Morse memorabilia installed in tne north hall of the Arts and Industries Building on the occasion of the centennial anniversary of the sending of the first telegram in 1844.

Some improvement was effected in the status of the numismatic storage series by assembling this material in the two rooms at the north end of the historical suite. In this space many numismatic items of scientific and popular interest have been arranged in topical and chronological order, so as to be conveniently available for study purposes under proper supervision. This material includes ancient, medieval, and modern coins that are not so well preserved as similar coins now on exhibition. In addition, the space now also contains a large series of civil, naval, and military decorations of the United States and foreign countries arranged topically and chronologically and available for study and reference. These installations were made by James R. Sirlouis, scientific aide.

Except for the very recent issues and the stamps from Germany or from enemy-controlled countries, the cataloging of the postage-stamp collection is practically up to date. Exhibition was greatly improved during the year by the addition of new cabinets.

INVESTIGATION AND RESEARCH

During the past year the members of the scientific staff of the division continued their work in connection with the history of arms, flags, insignia, costumes, coins, and stamps.

Lots of material received for identification from outside agencies and individuals numbered 29.

DISTRIBUTION AND EXCHANGE OF SPECIMENS

Five lots (95) specimens, mostly firearms and drawings by official artists of World War I, were lent to individuals and Governmental agencies.

NUMBER OF SPECIMENS UNDER DIVISION

Art	1, 593
Civil	16, 235
Naval	2, 238
Military	27, 229
Numismatic	50, 838
Pictorial	16, 798
Philatelic	414, 502
Total	529, 433

ACCESSIONS DURING THE FISCAL YEAR 1943–1944

(Except when otherwise indicated, the specimens were presented or were transferred, in accordance with law, by Bureaus of the Government)

ABBOTT, THOMAS G., Washington, D. C.: Print entitled "George Washington's Last Interview with His Mother, 1789," from the original painting by W. H. Powell (166079).

ABBOTT FUND, W. L., Smithsonian Institution: 3,281 birds, plants, mollusks, mammals, and insects collected in Colombia by M. A. Carriker, Jr. (164565).

ACADEMY OF NATURAL SCIENCES OF PHILADELPHIA, Philadelphia, Pa.: 52 plants from South America (166893, exchange).

ACUNA, Ing. JULIAN, Habana, Cuba: Plant from Cuba (165500).

AGELASTO, A. M., Alexandria, Va.: Heart-shaped jewel box of cloisonné enamel on copper (166219).

AGRICULTURAL EXPERIMENT STATIONS, Gainesville, Fla.: (Through Dr. A. N. Tissot) 8 insects (166939).

AGRICULTURE, U. S. DEPARTMENT OF:

Bureau of Entomology and Plant Quarantine: 97 isopods, 4 amphipods, 25 ostracods, 3 mollusks, and 3 fishes (165805, 166086, 166333, 166530, 166791, 166940, 166961, 167330, 167374, 167590); a colony of 3-banded Italian bees (167558 loan); 6 mollusks from England and the Azores; 6 amphipods, 1 isopod (167588); 57,000 miscellaneous insects retained by the various specialists out of material sent to the Bureau for identification, not covered by other accession records (167827).

Forest Service: 26 plants from Panama (166320); 5 plants from United States (166687); plant from New Mexico (167226); 264 specimens of woods collected in Costa Rica, Panama, and Ecuador during 1943, in connection with the Latin American Forest Resources Project (166689, 167405, 167539); (through J. L. Stearns) samples of 11 woods collected in Ecuador, Panama, and Costa Rica under the Latin American Forest Resources Project, 1943 (166577); (through W. A. Dayton) 96 plants from Costa Rica (165761, 165885, 166066, 166277).

Bureau of Plant Industry: 99 plants from Colombia (167294, 167683); plant from Arizona (167484); (through Prof. H. H. Bartlett) 121 plants (165638, 165737, 166609, 166860); (through Dr. J. T. Baldwin, Jr.) 164 plants from Matto Grosso, Brazil (166686); (through Dr. O. F. Cook) 5 plants (165755); (through A. C. Dillman) plant from Oregon (166892); (through Dr. T. H. Kearney) 6 plants from Arizona (166176, 167713).

AITKEN, Capt. T. H. G., New York, N. Y. (APO): 57 mosquito larvae from Egypt and Naples, Italy (167143).

ALABAMA GEOLOGICAL SURVEY, University, Ala.: (Through Dr. T. Wayland Vaughan) 11 cotype specimens of Foraminifera and some duplicates from Caledonia, Wilcox County, Ala. (165744).

ALBERTO, Brother TOMÁS, Salamina, Caldas, Colombia: 14 plants from Colombia (166643).

ALDRICH, Dr. JOHN W. (See under U. S. Department of the Interior, Fish and Wildlife Service.)

ALEXANDER, Prof. C. P., Amherst, Mass.: 3 flies (1 larva and 2 pupae) from Japan (166292); 22 flies, including 11 paratypes (167086).

ALLARD, H. A., Arlington, Va.: 1,000 plants from Virginia and West Virginia (166688).

ALVARENGA, Dr. L., San Salvador, El Salvador: 2 slides of scale insects from El Salvador (167296).

AMBERSON, Lt. Comdr. J. M., M. C., Corpus Christi, Tex.: 14 mammals collected at Corpus Christi Naval Air Training Station (166013, 166107, 166205, 166572); (through Dr. Ernst Schwarz) 5 birds (116140).

AMBERSON, Lt. L., Myrtle Beach, S. C.: 28 mosquito larvae mounted on slides (166624).

AMERICAN BOSCH CORPORATION, Springfield, Mass.: Fuel injection system for Diesel engines (167594).

AMERICAN DENTAL ASSOCIATION, Chicago, Ill.: A collection of materials illustrating dentistry and oral hygiene (166026).

AMERICAN HEART ASSOCIATION, New York, N. Y.: A series of 12 life-size models of normal and abnormal hearts (166342).

AMERICAN MUSEUM OF NATURAL HISTORY, New York, N. Y.: An 82-gram slice of the Lowicz, Poland, meteorite (165762, exchange); cast of an extinct reptile skeleton (166989, exchange); casts of the bones of a flying reptile (167291, exchange); (through Dr. George H. Childs) 6 lots of parasitic worms (166454); (through Dr. Ernst Mayr) 20 birds (166834); (through John T. Nichols and Dr. C. M. Breder) 4 paratypes of fishes (165535, exchange); (through John T. Nichols and Dr. Samuel F. Hildebrand) 4 paratypes of fishes, new species by Hildebrand, collected January 6, 1920, by Dr. R. C. Murphy at Lobos de Tierra Island, Peru (166341).

AMERICAN NUMISMATIC ASSOCIATION, New York, N. Y.: (Through Sgt. David M. Bullowa) French coins as follows: 2 10-centime pieces, 1941; a 20-centime piece, 1941 (165725, loan); 7 coins of Italy and Tunis struck during 1939–1943 (167101, loan).

AMERICAN PHOTOGRAPHIC PUBLISHING Co., Boston, Mass.: 75 salon prints, reproduced in the American Annual of Photography, 1944 (166812, loan).

ANDREWS, Prof. E. A., Baltimore, Md.: 51,000 neritid mollusks and 850 microscope slides pertaining to the Neritidae (166211).

ANDUZE, Dr. PABLO J., Caracas, Venezuela: 7 flies, including 2 holotypes (167102).

ANGELL, J. W., New York, N. Y.: 2 beetles, topotypes (165614, exchange).

ANONYMOUS: 2 diffraction gratings; 30 photographic lenses, a collection representing various kinds in use over the past 70 years; a Leyden jar battery, a static electric machine, and X-ray tube; 1 14-by-17 American Optical Co. View Camera and 1 View tripod, 12-inch head, found in photographic laboratory and listed in an 1876 catalog as selling for $5; 3 bird skins (166691, 167186, 167187, 167628, 167831). Found in collection without number.

APOLINAR-MARÍA, Rev. Brother, Bogotá, Colombia: 46 plants from Colombia (166436, 167105).

ARCHER, Dr. W. ANDREW. (See under Instituto Agronômico do Norte.)

ARCHINO, SAMUEL P., Washington, D. C.: About 1,200 mollusks from Trinidad, also 12 specimens of coral (165525).

ARKANSAS GEOLOGICAL SURVEY, Little Rock, Ark.: (Through H. E. Wheeler) Specimen of novaculite from Hot Springs, Ark. (167708).

ARNOLD, GEORGE. (See under National Museum of Southern Rhodesia.)

ARNOLD, LILLIAN. (See under University of Florida, Gainesville, Fla.)

ASHBURN, W. R., Woodbridge, Va.: 5 amphipods from a well (165546).

AUTO-ORDNANCE CORPORATION, New York, N. Y.: A Thompson submachine gun (165719).

AVILEZ, IGNACIO, Washington, D. C.: 31 specimens of Mexican paper currency (165739).

BAHOVEC, FRED, Baranof, Alaska: 1 sponge, 1 polychaete worm, 3 leeches, 2 crabs, 4 anemones, and some mollusks (165718).

BAKER, Capt. J. A., Ithaca, N. Y.: 21 mammals from Canada (166108, 166257, 166549, 166917).

BAKER, JAMES S., Washington, D. C.: Specimen of native silver and chalcocite from Cole mine, 1,200 level, near Bisbee, Ariz. (167824). (See also under Foreign Economic Administration.)

BALDWIN, Dr. J. T., Jr., Miami, Fla. (See under U. S. Department of Agriculture, Bureau of Plant Industry.)

BALL, Dr. C. R., Washington, D. C.: 2 plants from Texas (165499, exchange); 13 plants (166278, exchange).

BALL, WILLIAM HOWARD, Washington, D. C.: Collection of marine invertebrates, 1 insect larva, and 3 lots of mollusks from Dare County, N.C., and Virginia Beach, Va. (166137).

BALLS, EDWARD K., Arlington, Va.: 158 plants from Virginia (167839).

BANDY, MARK C. (See under Mr. Coope and Fernándo Araya Valdés.)

BANKS, Prof. NATHAN, Cambridge, Mass.: 25 amphipods (166932). (See also under Harvard University, Museum of Comparative Zoology.)

BARBOUR, Dr. THOMAS. (See under Harvard University, Museum of Comparative Zoology.)

BARCONS, ZULEMA, New York, N. Y.: 40 block prints with monotype combination, for special exhibition, September 27 to October 24, 1943 (166127, loan); 4 block prints of a single subject, "Andromeda," each print an individual variation of an original process developed by the donor (166835).

BARKER, R. WRIGHT, Houston, Tex.: (Through T. Wayland Vaughan) Thin sections of 2 species of a foraminifer from near San Pedro Miradores, State of Veracruz, Mexico (165745).

BARKLEY, Dr. FRED A. (See under University of Texas.)

BARLEY, EDMUND E. (See under Edmund U. Barley.)

BARLEY, EDMUND U. (deceased): (Through Edmund E. Barley) Flax hetchel, dated 1739, which was used for 200 years by members of the Barley family in Ulster County, N. Y. (165907).

BARTLETT, Dr. H. H. (See under U. S. Department of Agriculture, Bureau of Plant Industry.)

BARTLETT, Capt. ROBERT A., New York, N. Y.: Marine invertebrates, echinoderms, mollusks, fish, insects, and plants, from northern waters; also some fossils (165293).

BARTLEY, FLOYD, Circleville, Ohio: 2 plants from Ohio (167099).

BARTSCH, Dr. PAUL, Washington, D. C.: A collection of reptiles from Lebanon Farm, Virginia, made in 1943–44 (167715).

BAUGHMAN, J. L., Houston, Tex.: 7 fishes from Texas (166874).

BAUSOR, Dr. SYDNEY C., Salinas, Calif.: Plant from California (166759).

BAYER, Corp. FREDERICK M., Venice, Fla.: 28 mollusks from Florida (166271).

BAYLIES, GRACE D., East Orange, N. J.: (Through Mrs. Charles C. Burt) United States national flag made during Civil War (167155).

BEACH, JESSIE G., Washington, D. C.: 1 skin of yellow-billed cuckoo (167773).

BEAMER, Prof. R. H., Lawrence, Kans.: 6 paratypes of insects (166777, exchange).

BEAN, BARTON A., Washington, D.C.: 21 fishes from Barnegat Bay, Seaside Park, N. J., collected by donor in July and August 1926 (166532).

BEATTIE, R. KENT, Washington, D. C.: Rain cape of palm fiber collected by the donor from the Taiwan of central Formosa in 1928 (166542).

BEATTY, HARRY A., Christiansted, St. Croix: 4 mammals and 6 sets of bird eggs from Virgin Islands (166049, 166228, 166649, 167834). (See also under U. S. Department of the Interior.)

BECKER, Mrs. GEORGE F., Washington, D. C.: Two earthenware alabastra from an unnamed site near Sbeitla, about 60 miles southwest of Kairwan, Tunisia (166743).

BEEBE, Dr. WILLIAM, New York, N. Y.: Two fishes, holotypes, collected in Caripito, Venezuela, by the donor in 1942 (166264). (See also under New York Zoological Society.)

BEHR, Ensign E. A. (See under U. S. Navy Department.)

BEHRE, Dr. ELLINOR H., Baton Rouge, La.: About 40 marine invertebrates and 2 holothurians (165896). (See also under Louisiana State University.)

BEN DAY, Inc., New York, N. Y.: 1 framed screen of Ben Day film #509B (166579).

BENEDICT, J. E., Jr., Washington, D. C.: 13 plants from eastern United States (165711, exchange).

BENN, RAYMOND, Portsmouth, Va.: 5 projectile points and a chipped blade found in Portsmouth, Norfolk County, Va. (165529).

BEQUAERT, Dr. JOSEPH C., Boston, Mass.: 6 wasps—paratypes of 2 species (165555, exchange); 1 wasp, paratype (165953).

BERRY, Dr. C. T. (See under Johns Hopkins University.)

BILLE, BERT, Brandon, Wis.: 1 Dutch Bible, printed in 1690; 1 Dutch book, "Historisch Sterf-Huys," printed by Joannes Borstius in 1668; and 3 arrowheads from Wisconsin (167511).

BIRCKHEAD, HUGH, New York, N. Y. 13 birds from North Africa (165664, 165833).

BJORKMAN, JOHN G., Los Angeles, Calif.: 1 engraving on plastic of a composite subject including a statue of Robert E. Lee, with Lincoln, the Capitol, and P–38's in background (Pat. 2126088); 1 engraving on plastic of a mountain trout in colors (167469).

BLAKE, Dr. S. F., Arlington, Va.: 19 lots, 47 mollusks; 2 lots of crabs; 1 echinoderm; and 6 lots of fish, all from the Pleistocene of Wailes Bluff, Md. (166151); 1 metacarpal of a fossil seal from Calvert formation, Miocene, zone 10, Scientists Cliff, Calvert County, Md. (166547); 3 mollusks from Mona Island, Puerto Rico (167692).

BLAKE, S. T., Brisbane, Queensland: 76 specimens and 1 photograph of grasses from Australia (167510, exchange).

BLAKELY, E. B., Wallingford, Conn.: A collection of 209 photographic negatives of early automobiles (166403).

BLISS, ELIZABETH B., Washington, D. C.: Collection of toy soldiers of the latter part of the 19th century (166770).

BLISS, Hon. and Mrs. ROBERT WOODS, Washington, D. C.: Woven, decorative tent border from the Yemen, Southwest Arabia (165905).

BLUE, GEORGE V., Washington, D. C.: Antique sugar bowl of Britannia ware (165690).

BLYSTONE, E. L., Ardara, Pa.: 1 wood frog found under 5 feet of shale rock at Ardara (165651).

BOHART, Ensign RICHARD M., Williamsburg, Va.: 15 slides, representing 15 species of mosquitoes, and 1 beetle (166909, 167624).

BOHLS, Dr. S. W., Austin, Tex.: 7 mosquitoes (166303, exchange). (See also under Texas State Board of Health.)

BOLTON, THEODORE, New York, N. Y.: 8 etchings by the donor (165853).

BOOS, C. M., Hyattsville, Md.: 1 specimen of sylvite and blue halite from mine of U. S. Potash Co. near Carlsbad, N. Mex. (166331).

BOTKE, CORNELIS, Santa Paula, Calif.: 36 etchings by Cornelis Botke, for special exhibition, January 3 to 30, 1944 (166626, loan).

BOTTIMER, L. J., Beltsville, Md.: A small collection of beetles, including the first recorded specimen of one species from Louisiana (165764).

BOURGEOIS, MARIE E., Mexico, D. F.: 1,490 mollusks, 10 caddisfly cases, 2 phyllopods, and 8 beetles from Mexico (165758, 166071, 166534).

BOURQUIN, FERNANDO, Buenos Aires, Argentina: A small collection of eggs, blown larvae, pupae, cocoons, and adults of Lepidoptera from Argentina; 5 insects, including 4 new to the Museum collections (165669, 167236).

BOWER, W. J., St. Petersburg, Fla.: 9 mollusks from Tampa Bay, Fla (166372, exchange); 8 eggs and a young octopus (166742).

BOWMAN, Dr. JOHN R., Pittsburgh, Pa.: 9 beetles, representing 6 species, all by types and 3 by paratypes as well (165496, exchange).

BRACELIN, Mrs. H. P., Berkeley, Calif.: 8 ferns from Peru (131387).

BRADLEY, WALTER W. (See under California Department of Natural Resources.)

BRECKINRIDGE, SOPHONISBA P., Chicago, Ill.: Silver cup made by the American silversmith T. J. Shepard and bearing an inscription including the name of Margaret Desha, the great, great grandmother of the donor (166402); sterling silver pitcher (American) made about 1856 and bearing maker's mark "Kinsey" (167252).

BREDER, Dr. C. M. (See under American Museum of Natural History.)

BRENCKLE, Dr. J. F., Mellette, S. Dak.: 21 plants, mostly from South Dakota (166652).

BRENNER PHOTO Co., Washington, D. C.: 1 Watkins exposure meter, 1880 and 1 amateur oil-burning dark-room lamp (165668); 1 Agfa flashlight lamp and 1 sparking flashlight lamp burning flashlight powder (165855); 4 pieces of early photographic apparatus (167047); 1 box camera and roll of film, of about 1900 (167528); 1 Weno Hawk-eye roll film camera #2, manufactured by Blair Camera Co., Rochester, N. Y. (167696).

BRIDWELL, J. C., Falls Church, Va.: 2 salamanders and a greensnake from Virginia collected in 1943–44 (167714).

BRIGHAM YOUNG UNIVERSITY, Provo, Utah: (Through Dr. Vasco M. Tanner) 3 weevils, paratypes of 2 species (165039, exchange).

BRINKMAN, A. H., Craigmyle, Alberta: 23 grasses from Canada (166524, 166782).

BRITISH MUSEUM (NATURAL HISTORY), London, England: 1 plaster cast of a carboniferous crinoid (holotype) (166955).;

BROOKING, Dr. A. M. (See under Hastings Museum.)

BROOKLYN BOTANIC GARDEN, Brooklyn, N. Y.: 184 plants from Ecuador and Peru (165795).

BROOKS, A. B. (See under Canadian Government, Department of Agriculture.)

BROOKS, Dr. JOHN L., New Haven, Conn.: 1 isopod from ant's nest (166236).

BROOKS, Mrs. MORGAN, Washington, D. C.: Pair of high white-kid buttoned shoes, period of the 19th century (165689).

BROWN, JOSEPH M., Arlington, Va.: Woman's costume consisting of scarf, jacket, and skirt of hand-woven abaca cloth, obtained by donor in 1909 from a woman weaver at Loreto or La Paz, southern Agusan Province, Mindanao, Philippine Islands (166640).

BROWN, W. L., Washington, D. C.: 2 squirrels collected at Goldsboro, N. C., December 12, 1929 (166573).

BUEHLER, Dr. H. A., Rolla, Mo.: A specimen of flintlike clay, boehmite, from near Swiss, Gasconade County, Mo. (166990).

BULLOWA, Sgt. DAVID M (See under American Numismatic Association.)

BURCH, JOHN Q., Redondo Beach, Calif.: Approximately 1,000 mollusks from Redondo Beach (166694).

BURKE, JACKSON, San Francisco, Calif.: 1 book, "Prelum to Albion" by Jackson Burke (167776).

BURKE, Pfc. JAMES P., San Francisco, Calif. (APO): 101 butterflies representing 35 species or forms, of which 22 are new to our collection (167251).

BURKE, Mrs. PAULINE WILCOX, Washington, D. C.: Silver medal of Pope Leo XIII, 1891, and photographs of two portraits of Emily Tennessee Donelson (165821).

BURRILL, A. C., Jefferson City, Mo.: A collection of miscellaneous insects (166003).

BURT, Mrs. CHARLES C. (See under Grace D. Baylies.)

BURT, Prof. CHARLES E., Winfield Kans.: 140 mollusks from Germany (167138).

BURTON, ROBERT E., San Francisco, Calif.: 14 plants (grasses) from New Hebrides (167418).

BUTTS, Dr. DONALD C. A., Washington, D. C.: 2 snakes, 4 frogs, and 2 birds from Trinidad and British Guiana (166339).

BUXTON, Prof. P. A., London, England: 20 mosquitoes, representing 8 species (166698).

CABAL C., ADRIANO. (See under Colombia Department of Agriculture.)

CABALLERO C., Dr. EDUARDO, Mexico, D. F.: 4 cotypes of helminths (167353, 167468).

CALDWELL, Dr. J. S., Circleville, Ohio: 1 paratype of insect (165608, exchange).

CALIFORNIA ACADEMY OF SCIENCES, San Francisco, Calif.: 21 plants from Mexico (164400, 165862, exchange); 27 plants from western United States (166552, 166750, 167600, exchange); 1 plant from Greenland (167027, exchange).

CALIFORNIA ART PRODUCTS, INC., Santa Monica, Calif.: 3 vases and 2 bowls of Hollywood ware (167281).

CALIFORNIA DEPARTMENT OF NATURAL RESOURCES, *Division of Mines*, San Francisco, Calif.: (Through Walter W. Bradley) 4 crystals of scheelite from Marengo district, San Bernardino County, Calif. (166696).

CALIFORNIA, UNIVERSITY OF, Berkeley, Calif.: 694 plants from Peru (166933, exchange).

CALLAN, Dr. E. McC., Trinidad, B. W. I.: (See under Imperial College of Tropical Agriculture.)

CAMERA CLUB, THE, New York, N. Y.: 51 pictorial photographs for exhibition during December 1943 (166599, loan).

CANADIAN GOVERNMENT, Ottawa, Ontario:

Department of Agriculture, Entomological Branch: 1 insect (166665); (through A. B. Brooks) 9 flies (166274); (through T. N. Freeman) 2 moths (164473); (through Dr. Robert G. Glen) 51 beetle larvae, representing 15 species; 10 specimens and cast of skins of 3 insect larvae (143991, exchange; 165954); (through Hugh B. Leech) 4 beetles, all paratypes (166520).

Geological Survey, Biological Division: 85 fishes received in 1918 partly from Canadian Stefansson Expedition to the Arctic, 1913–1916 (166258).

National Museum of Canada: (through H. T. Harkness) 186 plants from New Brunswick (167682, exchange).

CANFIELD FUND, Smithsonian Institution: 1 covellite specimen from Butte, Mont., and 1 libethenite specimen from Yerington, Nev. (167621).

CANNON, FRANCIS M., Washington, D. C.: Kentucky rifle of the early part of the 19th century (165901).

CAPITAL TRANSIT CO., Washington, D. C.: 3 models—2 street cars and 1 bus (166731, loan).

CARBORUNDUM CO., Niagara Falls, N. Y.: 4 transparencies illustrating the manufacture of carborundum (166523).

CÁRDENAS, Dr. MARTÍN, Cochabamba, Bolivia: 45 plants from Bolivia (165698).

CARNEGIE INSTITUTION OF WASHINGTON, Washington, D. C.: Oil painting by Joseph Lindon Smith entitled "Sculptured Bas Relief Below Temple of the Jaguars" at Chichen-Itzá, Yucatán (166153); the Albert Mann Diatom Collection, comprising approximately 8,000 mounted diatom slides, more than 200 diatom negatives, 300 lantern slides, several thousand of samples of crude diatom material (estimated about 10,000 to 12,000 samples), including bottles of recent material and fossil earths (167206).

CARNEGIE MUSEUM, Pittsburgh, Pa.: (through Dr. L. K. Henry) 521 plants (165989, exchange).

CARPENTER, Maj. STANLEY J. (See War Department, Fourth Service Command Medical Laboratory.)

CARR, MARY LOUISE, Washington, D. C.: A French color print, "L'Amant Surpris," after the painting by F. Schall, engraved by C. M. Descourtis (167264).

CARTWRIGHT, O. L., Clemson College, S. C.: 28 beetles, including holotypes of 8 species, paratypes of 5 other species (167555, exchange); 1 beetle (166171).

CASE, KATIE E., Davenport, Iowa: Bronze coat button of the type worn by admirers of William Henry Harrison, during the presidential campaign of 1840 (165915).

CASSEL, Sgt. JOSEPH F., Wyomissing, Pa.: 3 bird skins (165820).

CASTLE DOME COPPER CO., Miami, Ariz.: (through Harold D. Maryott) 2 wulfenites from the 4350 bench of the Castle Dome mine near Miami, and 1 lot of green druse (unidentified) (167471).

CAUVIN, ANDRÉ, New York, N. Y.: A collection of photographs by Mr. Cauvin entitled "Belgian Congo at War," for special exhibition during April 1944 (167055, loan).

CEOUGH, RICHARD, New York, N. Y.: Man's costume collected by the donor from the Chamula Indians of Zinacatan, Chiapas, Mexico, consisting of trousers and 2 ponchos of hand-woven cotton, a hand-woven woolen belt, a scarf, skin bag, and a double-weave straw hat (166543).

CHAMBERLAIN FUND, FRANCES LEA, Smithsonian Institution, Washington, D. C.: 1 pink topaz from Brazil, weighing 34.1 carats (165831).

CHANCELLOR, J. L. (See under Dr. G. W. Harley.)

CHANDLER, Prof. ASA C., Houston, Tex. (See under Rice Institute.)

CHAPIN, Dr. E. A., Washington, D. C.: 1 cast-iron pin tray in form of beetle, late 1800's (166276). (See also under Smithsonian Institution, U. S. National Museum.)

CHARDON, Dr. CARLOS E., Mayagüez, Puerto Rico: Specimen of plant (165898).

CHASE, Mrs. AGNES, Washington, D. C.: 356 grasses from Australia (165534, 165657, 195691, 166809, 167053, 167261, 167677); 17 grasses from China, collected by H. Sheehan (165616); 49 miscellaneous grasses (165776); 8 grasses from Fiji Islands (166891); 2 grasses from Argentina (167229); 107 grasses from various sources (167293).

CHICAGO NATURAL HISTORY MUSEUM, Chicago, Ill.: 2 ferns from Peru (166493, exchange); 58 plants largely from Guatemala (166895, exchange); 15 fishes (166995, exchange); 1 photograph of type specimen of plant (167014, exchange); 7 plants from Hawaiian Islands (167208, exchange).

CHILDRESS, Dr. M., Huntington, W. Va.: Pitted discoidal stone found near Unionville, Iowa (165799).

CHILDS, Dr. GEORGE H. (See under American Museum of Natural History.)

CHRYSLER, Prof. M. A., New Brunswick, N. J.: 7 photographs of ferns (166749.)

CLARK, Dr. HUBERT L. (See under Harvard University, Museum of Comparative Zoology.)

CLEAVES, Mrs. MINERVA C., Westfield, Mass.: 9 engraved wood blocks and 2 wood engravings, "Swift River, Conway, N. H." and "Intervale, Mt. Washington," by W. P. Cleaves (166110.)

CLEBSCH, ALFRED, Clarksville, Tenn.: 2 grasshopper sparrows (165882).

CLEMENT, Brother, Santiago, Cuba: 21 ferns from Cuba (165913, 167498).

CLEMENTS, J. MORGAN, Demopolis, Ala.: Chinese Buddha of wax coated with pearl nacre (165771); 2 Korean and 1 Chinese bronze mirrors, a small Chinese bronze vase and a piece Chinese knife money of the late Chou period, and 2 Chinese hair ornaments (165513).

CLENCH, WILLIAM J., Cambridge, Mass. (See under Harvard University, Museum of Comparative Zoology.)

CLEVELAND-CLIFFS IRON CO., Cleveland, Ohio: (Through Comdr. W. M. Connelly) Model of Great Lakes steamer *William G. Mather* (167194).

CLOSSON, A. B., JR., Co., Cincinnati, Ohio: 10 prints of scenes during the period of the Greely Relief Expedition, 1884 (165486).

CLOVER, Dr. ELZADA U., Ann Arbor, Mich.: 35 grasses from Arizona (166836).

COCKERELL, Prof. T. D. A., Boulder, Colo.: 3,981 bees from donor's personal collection (165878); 210 including many named bees new to the collection (167704).

COE, Prof. W. R., La Jolla, Calif.: 13 mollusks from California (166323, 167737).

COKER, Prof. R. E., Chapel Hill, N. C.: 15 slides of fresh-water copepods (11+ specimens) (165643).

COLOMBIA DEPARTMENT OF AGRICULTURE, Barranquilla, Colombia: (Through Adriano Cabal C.) A small collection of miscellaneous insects from Colombia (165487).

COLUMBIA INSTITUTION FOR THE DEAF, Washington, D. C.: Herbarium of the late John W. Chickering, Jr., consisting of 10,550 specimens of plants, mostly from the United States (167838).

COMISION DE BOTÁNICA, *Secretaria de Agricultura y Fomento*, Cali, Colombia: 119 plants from Colombia (166186, exchange).

CONARD, Prof. HENRY S., Grinnell, Iowa: 80 mosses (167013).

CONNELLY, Comdr. W. M., Washington, D. C. (See under Cleveland-Cliffs Iron Co.)

COOK, Dr. O. F. (See under U. S. Department of Agriculture, Bureau of Plant Industry.)

COOKE, Dr. C. WYTHE. (See under Hugh Iltis.)

COOKE, SAMUEL LEE, Upper Marlboro, Md.: 1 red-tailed hawk in the flesh (166625).

COOLEY, Dr. R. A. (See under Federal Security Agency, U. S. Public Health Service.)

COOPE, Mr., and FERNÁNDO ARAYA VALDÉS, Antofagasta, Chile: (Through Mark C. Bandy) 1 specimen of the María Elena, Chile, meteorite weighing 15½ kilograms (166302).

COOPER, Mrs. DELILA, Sylacauga, Ala.: (Through E. A. Kelly) 1 set of pharyngeal bones bearing teeth of the "freshwater drumfish," dug up in donor's yard (166252).

COOPER, Dr. G. ARTHUR, Washington, D. C.: 1,145 mollusks, 67 brachiopods, 3 starfish, and 7 barnacles, all from Sinaloa, Sonora, and Veracruz, Mexico (167736). (See also under Smithsonian Institution, U. S. National Museum.)

COOPER, Prof. K. W., Princeton, N. J.: 177 pinned beetles and 17 vials of alcoholic specimens from Barro Colorado Island, Canal Zone (167144).

COREA, Lt. LUIS F., Naval Air Station, Patuxent River, Md.: 150 specimens of marine shells from Gambia, West Africa (167693).

CORNELL UNIVERSITY, *Department of Zoology*, Ithaca, N. Y.: (Through Edgardo Mondolfi) A collection of frogs from Venezuela collected by Edgardo Mondolfi and Gaston Vivas-Berthier (166031).

CORNMAN, Mrs. M. ALICE, Washington, D. C.: 81 plants from Panama (166154); 33 plants from Florida (166702).

COTTAM, Dr. CLARENCE. (See under U. S. Department of the Interior, Fish and Wildlife Service.)

COTTON-TEXTILE INSTITUTE, INC., New York, N. Y.: 27 cotton fabrics produced by American manufacturers for the spring and summer of 1944 (166813).

COUNCIL FOR SCIENTIFIC AND INDUSTRIAL RESEARCH, Canberra City, A. C. T., Australia: (Through William Hartley) 120 grasses from Australia (166109, exchange).

CRAIGHEAD, Ensigns FRANK C., JR., and JOHN H. (See under Smithsonian Institution, U. S. National Museum.)

CRAM, Dr. ELOISE B. (See under Federal Security Agency, U. S. Public Health Service.)

CREASER, Dr. EDWIN P., Brunswick, Ga.: 17 isopods (167546, 167676).

CROCKETT, Dr. R. L., Oneida, N. Y.: 137 plants from Texas (167753).

CROPLEY, RALPH E. (See under President Franklin Delano Roosevelt.)

CROSSETT, EDWARD C., Wianno, Mass.: 71 pictorial photographs (166246, loan).

CROWSON, Dr. ROY A., Kent, England: 4 insects (167416, exchange).

CURTISS, ANTHONY, Port-au-Prince, Haiti: A small collection of bats, reptiles, amphibians, fishes, crustaceans, and insects from Haiti (166605).

CURTIS, Mrs. ELEANOR PARKE, Washington, D. C.: 4 pictorial photographs, "Port of Dreams," "Palaver," "Fog," and "Guardian of the Village" (167529).

CUTLER, Dr. HUGH C., São Paulo, Brazil: 10 plants from Bolivia (165537).

DAGGY, Lt. R. H., Bethesda, Md.: 36 insects (167181).

DAMPF, Dr. ALFONSO, Mexico, D. F.: A wood-rat skin from Sabinas, Coahuila (167079).

DANIEL, Brother, Medellín, Colombia: 84 mollusks and a small collection of insects from Colombia (165782, 166529); 59 plants from Colombia (166642, 167052).

DAPHNIS, Sgt. GEORGE, San Francisco, Calif. (APO): 1 grasshopper (167404).

DARTE, Mrs. M. H., Washington, D. C.: An oil painting entitled "An Incident of the Battle of Churubusco, August 20, 1847. Sergeant Kenaday Unloading a Powder Wagon" (167180).

DARVAS, DAVID, Cleveland, Ohio: 28 pictorial photographs for special exhibition, May 1–15, 1944 (167470, loan).

DAVIS, E. W., Washington, D. C.: 7,489 miscellaneous insects representing 638 species in 163 genera (165798).

DAVIS, Major H. A. (See under War Department, Army Medical Museum.)

DAVIS, Mrs. WILLIAM C., Arlington, Va.: Tiahuanacoid pottery vessel found east of Lake Titicaca between Conzata and Tacacoma, State of La Paz, Bolivia, purchased from the natives in July 1943 by William C. Davis (167680).

DAYTON, W. A. (See under U. S. Department of Agriculture, Forest Service.)

DECKER, Dr. CHARLES E., Norman, Okla.: 34 Cambrian brachiopods from Oklahoma (167642).

DEERING, A. J., New York, N. Y.: Cotype male of a tropical fish (165626).

DEGENER, OTTO, New York, N. Y.: 137 plants from the western United States (164630, 165903); 178 plants from Hawaii and western United States (165601).

DEICHMANN, Dr. ELISABETH. (See under Harvard University, Museum of Comparative Zoology.)

DELANO, Hon. FREDERIC A., Washington, D. C.: 42 coins, tokens, and medals and 2 Indian necklaces

(166088); 56 gold, silver, and bronze coins of the United States and foreign countries and bronze medals of the United States (166178); medals and decorations of France and the United States awarded to the donor in recognition of services performed during the First World War; a bronze medal presented to the Hon. James C. Peasley as one of the directors of the World's Columbian Exposition, Chicago, in 1893; a portrait medal of John Gutenberg, and bronze copy of gold medal awarded to George Washington by Continental Congress (13 specimens) (166361).

DEPARTAMENTO DE ZOOLOGICA, São Paulo, Brazil: (Through Dr. Oliverio M. de Oliveira Pinto) 1 bird skin (165986, exchange).

DEPAUW UNIVERSITY, Greencastle, Indiana: 106 plants (165796, exchange); 25 plants from Alabama (167148, exchange).

DESCHAPELLES, Ing. GEORGE B., Salida, Cuba: 20 beetles (165674).

DESERT SILVER, INC., Nivloc, Nev. (See under William J. Moore.)

DESIGN CENTER, INC., New York N. Y.: 8 black plastic recognition models of aircraft (167157).

DIEKE, Dr. G. H., Baltimore, Md.: 4 coccinellid beetles (166648).

DILL, WILLIAM A., Fresno, Calif.: 1 crayfish (166237).

DILLMAN, A. C. (See under U. S. Department of Agriculture, Bureau of Plant Industry.)

DISMANT, CARL L., Denver, Colo.: 1 specimen of gold ore from Itogon mine, Baguio, Benguet Province, Philippines (166469).

DOBSON, Dr. W. H. Yeungkong, Kwangtung, China: Specimen of Chinese "sack cloth" (167115).

DODGE & OLCOTT CO., Bayonne, N. J.: A specimen of oil of cajeput (165532); 6 2-ounce specimens of official medicinal oils for addition to materia-medica collections (167627).

DRAKE, Prof. CARL J.: Ames, Iowa: 5 lacebugs (1 a paratype), representing 4 genera (166255); 19 bugs, representing 12 species, 8 of which are represented by 11 paratypes (166619); 14 insects, representing 5 species of Hemiptera, 1 by a paratype (166808).

DREISBACH, R. R., Midland, Mich.: 3 insects, holotypes and a female paratype (165615).

DRYANDER, Mrs. EDITH, Cali, Colombia: 72 plants from Colombia (166187).

DUCHANOIS, Ensign F. R., Corpus Christi, Tex.: 1 fish and 1 shrimp from Corpus Christi Bay taken by J. O. Johnson, AMM 1/c, November 19, 1943 (166397).

DUNN, LAWRENCE H., Ovid, N. Y.: 1 insect, holotype (167625).

DUTILLY, Father, Washington, D. C.: (Through Dr. Hugh T. O'Neill) 78 miscellaneous insects collected by the donor in northwest Canada (165550).

EASTWOOD, Lt. KENNETH N., Washington, D. C.: Percussion lock target rifle, period of 1860 (166021).

EDMONDSON, Dr. C. H., Honolulu, T. H.: 4 mollusks from Hawaii (166124); 1 polyclad worm (166769); 1 vial each of eggs and adults of a new species of polyclad worms (167166).

EGBERTS, WILLIAM H., Washington, D. C.: 2 miter jigs (167772).

ELSON CO., INC., Belmont, Mass.: 3 reproductions in photogravure of old masters: "Angels' Heads," by Reynolds; "The Boyhood of Raleigh," by Millais; and a landscape "Return to the Farm," by Troyon (166364).

ELY, Prof. CHARLES A., Honolulu, T. H.: 6 echinoderms from Hawaii (165568, exchange).

EMERY, D. L., St. Petersburg, Fla.: 22 mollusks from Florida (166332).

EVERLY, REBECCA E., Macomb, Ill.: 3 hand-woven coverlets in plain, twill, and damask weaves; a printed and reversible Paisley shawl; 2 doilies embroidered in color and edged with Battenburg lace; a hardanger scarf and a large embroidered doily with crocheted edge (164228, bequest).

FAIRCHILD, Dr. GRAHAM B., Ancon, Canal Zone: 9 mosquitoes, representing 9 species, 7 by paratypes (166582).

FALKENAU, Col. ROBERT M., Washington, D. C.: 1 Hammond Multiplex typewriter, serial no. 229461A1, c. 1920 (166082).

FEDERAL SECURITY AGENCY:

Public Health Service, Bethesda, Md.: 4 mollusks from Florida (167523): (Through Dr. Eloise B. Cram) 234 mollusks from Florida, Louisiana, Texas, Alabama, and California (165722, 165790, 165792, 166517); (Through Dr. W. H. Wright) 1 specimen of dipterous insect (166259).

Public Health Service, Hamilton, Mont.: (Through Dr. R. A. Cooley) 6 ticks comprising 4 paratype adults and 2 paratype nymphs (166349, 166683); 44 lots of insects collected in Assam, India, by Dr. W. L. Jellison, 110 pinned specimens of miscellaneous insects and a collection of miscellaneous insects from the western States (167406); 23 vials of insects collected in Assam, India (167319).

Public Health Service, San Francisco, Calif.: (Through F. M. Prince) 6 fleas, paratypes (166721).

Public Health Service, San Juan, Puerto Rico: (Through Dr. Harry D. Pratt and J. Maldonado) A collection of miscellaneous insects taken in a trap lantern at the base of El Yunque in the Luquillo National Forest, Puerto Rico (166589); (through Dr. Harry D. Pratt) 128 mosquitoes and 11 slides of terminalia, comprising 58 adults and 70 larvae and representing 28 species, collected in Puerto Rico; 22 mosquitoes or parts (165656, 167623).

FENDRICK, Estate of Mrs. VIRGINIA S., Franklin County, Pa.: Invitation to the Inaugural Reception of President James A. Garfield and Vice President Chester A. Arthur at the National Museum March 4, 1881 (165919).

FENNAH, Dr. R. G., Castries, St. Lucia, B. W. I.: 105 specimens of lanternflies, representing 54 species, all type material including 45 holotypes, and 12 species of named material (165459); approximately 200 insects from Trinidad and 31 shells (165515); 26 insects representing 20 species, 16 of which are represented by type material (166610).

FERNALD, Dr. H. T., Winter Park, Fla.: 5 Lepidoptera (167048).

FERNALD, Dr. M. L. (See under Harvard University, Gray Herbarium.)

FERREYRA, Dr. RAMON. (See under Dr. Enrique del Solar.)

FESSENDEN, G. R., Washington, D. C.: 3 plants from the vicinity of Washington (167562).

FIELD, WILLIAM D., Washington, D. C.: 3,297 butterflies, including 37 holotypes and 160 allotypes and paratypes representing 40 species and varieties (166105).

FIGGINS, J. D. (See under University of Kentucky.)

FISCHER, O. H. (See under Union Diesel Engine Co.)

FISHER, Dr. A. K., Washington, D. C.: 29 lion claws from Ethiopia (166611).

FISHER, Prof. D. JEROME, Chicago, Ill.: A specimen of lithiophilite from the Black Hills of South Dakota (165528).

FISHER, GEORGE L., Houston, Tex.: 71 plants from Texas (166675).

FISHER, Dr. WALTER K., Pacific Grove, Calif.: 86 specimens of invertebrates including 2 abnormal starfishes from California (165547, 165848).

FISHERIES RESEARCH BOARD OF CANADA, *Atlantic Biological Station*, St. Andrews, New Brunswick: 4 amphipods from stream near Aulac, New Brunswick (166291).

FLORIDA POWER & LIGHT Co., Miami, Fla.: (Through Robert E. Pierce) Electric cable from Lake Worth, Fla., containing boring mollusks responsible for its destruction (167764).

FLORIDA, UNIVERSITY OF, Gainesville, Fla.: (Through Lillian Arnold) Specimen of grass from Florida (167542).

FLOYD, MARMADUKE, Savannah, Ga.: Archeological material from historic Indian burial site at Pallachucla Bluff on the Savannah River (165800).

FOLLANSBEE, Mrs. SADIE P., Washington, D. C.: Pair of epaulets owned by Commodore Joshua Follansbee, U. S. Navy (167174).

FOREIGN ECONOMIC ADMINISTRATION, Washington, D. C.: (Through Dr. C. D. Mell) 1 plant from Nicaragua (166490); 10 plants (166690); a collection of 15 minerals comprising 7 from Brazil, 5 from Africa, and 1 each from Colombia, Portugal, and Bolivia and consisting of columbite, tantalite, microlite, tapiolite, beryl, albite, topaz, garnet, ilmenorutile, and some unknown minerals (167825); (through James S. Baker) a specimen of tantalite (possibly mangano-) from Paraiba-Rio Grande do Norte area, Brazil (166919); (through Dr. C. D. Mell) 2 plants from Mexico (167228).

FORMAN, F. G., Perth, Western Australia: Specimen of manganocolumbite from Southwest Australia (167083).

FOSBERG, Dr. F. RAYMOND, Falls Church, Va.: 137 miscellaneous insects collected in Colombia (166908).

FOSHAG, Dr. WILLIAM F., Westmoreland Hills, Md.: Copper celts and stone artifacts from 3 sites in the state of Guerrero, Mexico (166293).

FOWLER, JAMES, Washington, D. C.: 15 isopods and approximately 55 amphipods from caves near Lexington, Va. (166346, 166945).

FOX, LORETTA E., Steubenville, Ohio: 2 seeds (167427).

FOX, Mrs. MARY, Custer, S. Dak.: 7 specimens of muscovite mica from White Spar mine near Custer, S. Dak. (165527, 165880).

FRACKER, Dr. S. B., Washington, D. C.: 2,309 hemipterous insects, 1,306 of these determined and representing 256 species (3 holotypes included) (166489).

FRASCHE, DEAN F., Washington, D. C.: 1 specimen of pitchblende, 1 of cassiterite, and 2 of malachite after heterogenite from Belgian Congo, and 1 of microlite from New Mexico (166907).

FRAYNE, Lt. (jg), Bainbridge, Md.: Type specimen of trematode (166468).

FREEMAN, T. N., Ottawa, Ontario: 2 reared specimens of Lepidoptera (167050). (See also under Canadian Department of Agriculture.)

FREY, D. G. (See under U. S. Department of the Interior, Fish and Wildlife Service.)

FRICK, CHILDS, New York, N .Y.: Antelopelike fossil animal from Papago Springs Cave, near Sonoita, Santa Cruz County, Ariz. (167290); cast of antelope skull from the Miocene, Clarendon, Tex. (167591).

FRITZ, Dr. MADELEINE A. (See under Royal Ontario Museum of Paleontology.)

FRITZSCHE BROTHERS, INC., New York, N. Y.: 1 specimen each of American styrax, concrete Florentine oil of orris root, bitter orange, N. F., and oil of eucalpytus, U. S. P. (165531, 167483).

FRIZZELL, Dr. DON L., Negritos, Peru: 8 lots and 1 slide of Eocene Foraminifera from Ecuador and 2 lots from Peru (166601).

FROESCHNER, RICHARD C., St. Louis, Mo.: 199 insects (165972).

FROST, C. A., Framingham, Mass.: 11 miscellaneous beetles (166685).

FRUTH, Mrs. ROWENA, Connersville, Ind.: 43 pictorial photographs (165906, loan).

FUNDAÇÃO ROCKEFELLER, Divisão Sanitaria Internacional, Rio de Janeiro, Brazil: 3 adults and 8 slides of mosquito material, all type or paratypes (166763).

FURNISS, M. (See under Gazette Printing Co.)

GABRIEL, Dr. ALTON. (See under U. S. Department of the Interior, Bureau of Mines.)

GAIGE, Mrs. HELEN T. (See University of Michigan, Museum of Zoology.)

GALINDO, PEDRO, Berkeley, Calif.: 4 slides of fly material, representing 3 species (166130).

GANIER, ALBERT F., Nashville, Tenn.: 2 grasshopper sparrows (165883).

GARDIA B., Dr. HERNÁNDO. (See under Instituto de Ciencias Naturales.)

GARDINER, CHANDLER B. (See under Johnson Automatics, Inc.)

GARNISS, Chief Warrant Officer WILLIAM BRADFORD, Washington, D. C.: Naval uniform, cap and coat; 5 naval medals; and one "crossing the line" certificate (167700).

GARRETT, FRANK W., Arlington, Va.: 1 specimen of pyrochroite from near Newport, Va. (166203).

GATES, PHILIP, Jr., Rockville, Md.: 1 specimen of micaceous mica from Charles Ridge, Spear, Avery County, N. C. (166204).

GAZETTE PRINTING CO., LTD., Montreal, Quebec: (Through M. Furniss) 1 facsimile copy of old newspaper, "Gazette Litteraire, Pour la Ville & District de Montreal. Mercredi, 17 Fevrier, 1779," printed by Fleury Mesplet (166128).

GENERAL ELECTRIC CO., Bridgeport, Conn., jointly with WILLIAM SKINNER & SONS, New York, N. Y.: 25 specimens including Army Air Force electrically heated F-2 and F-3 flying ensembles, on figures, scientifically designed and constructed by General Electric to maintain maximum body efficiency under all temperature conditions; wired interlinings (167341).

GEORGETOWN UNIVERSITY, Washington, D. C.: (Through Father Lawrence Gorman) 350 mollusks (166344).

GILBERT, A. C., New Haven, Conn.: 2 Virginia-deer skulls from British Columbia (167443).

GILLASPY, Corp. JAMES E., Orlando, Fla.: 1 burrowing lizard from Orlando (165606).

GILLIS, DAVID, Washington, D. C.: 2 ichneumon-flies (165566).

GILMORE, Dr. RAYMOND M., Washington, D. C. (See under Office of Coordinator, Inter-American Affairs.)

GINSBURG, ISAAC. (See under U. S. Department of the Interior, Fish and Wildlife Service.)

GLASS, JEWELL J., Washington, D. C.: 1 lot of triplite from Tungstonia, Nev. (167643).

GLEN, Dr. ROBERT G. (See under Canadian Government, Department of Agriculture.)

GOLDBERG, LOUIS, Norwich, Conn.: 1 pair of steel ice skates with iron ankle brace and wooden sole piece and 1 pair of all steel ice skates with ankle brace (165850).

GOLDRING, Dr. WINIFRED, Albany, N. Y. (See under New York State Museum.)

GÓMEZ, Prof. José Royo Y., Bogotá, Colombia: Cast of the type specimen of a barnacle from the Cretaceous of Colombia (165063).

GORDON, Lt. W. M., San Francisco, Calif. (Fleet P. O.): 1 snake from New Guinea (167008).

GORMAN, Father LAWRENCE. (See under Georgetown University.)

GRANICH, Capt. LEONARD, New York, N. Y. (APO): 1 flea collected in Newfoundland (166692).

GRANT, Mrs. T., Turrialba, Costa Rica: 75 miscellaneous insects collected in Costa Rica (167153).

GREENE, GEORGE M., Harrisburg, Pa.: 1 skull of kingfisher (167234).

GREGG, Dr. WENDELL O., Los Angeles, Calif.: 5 mollusks from Utah (166739).

GUIDEY, LEO L., Morgan City, La.: (Through Dr. Samuel F. Hildebrand)

1 fish from Oyster Bayou Light Station, Morgan City, La. (165502).

GULF REFINING CO., Mattoon, Ill.: 7 cartons of well cores containing Devonian fossils (165029).

HABANA, UNIVERSITY OF, Habana, Cuba: (Through Dr. J. M. Osorio) 59 miscellaneous insects from Cuba (165786).

HADLEY, Sgt. JAMES E., San Francisco, Calif. (APO): 1 lizard and a small collection of insects from New Guinea (166268); 77 specimens, representing 44 species, of insects, millipeds, and spiders, and 2 crabs (166716).

HALE, Lt. Col. M. W., V. C., Quebec, Quebec: Skin and skull of a muskrat from Grosse Isle, Quebec (167629).

HALL, Capt. DAVID G. (See under Dr. C. H. T. Townsend.)

HALL, GLEN L. San Francisco, Calif.: (Through Dr. V. D. P. Spicer) 1 mollusk from Midway Island (165829)

HALSEY, Mrs. LEROY, Atlanta, Ga.: China cup and saucer used at the wedding of Angelica Singleton to Maj. Abram Van Buren in 1838 (167607).

HAMEL, CLAUDE C., Amherst, Ohio: 5 septarian concretions in marcasite from the Devonian rocks near Amherst (166040).

HAMILTON, HENRY W., Marshall, Mo.: Fragmentary textile samples and copper from Spiro Mound, on right bank of Arkansas River about 5 miles north of Spiro, Le Flore County, Okla. (166197).

HAMILTON, Lt. J., Greensburg, Pa.: 10 frogs from Salinas, Ecuador (167119).

HAMMOND, ARTHUR, Boston, Mass.: 48 pictorial photographs (167089, loan).

HANCOCK, ALLAN, FOUNDATION, Los Angeles, Calif.: (Through Dr. Olga Hartman) 14 polychaete worms collected by Sgt. Milo W. Williams at Biloxi, Miss. (167655).

HANDLE & EXCELSIOR CO., Picture Rocks, Pa.: 7 specimens of brush and shovel handles, 1 all-wood lawn rake, and 1 all-wood hay rake (165975).

HANSON, Capt. J. J., Washington, D. C.: 25 model gasoline aircraft engines (167087, loan).

HARBER, LESLIE ARMSTRONG, Washington, D. C.: 3 centipedes from St. Lucia, B. W. I. (166637).

HARDIE, ISABEL H., Washington, D. C.: 9 pieces of decorated brass, also a message tube of decorated bamboo from the Moro of Mindanao, P. I.; two spoons of chased brass from Algiers and a small earthenware vase from the Tewa pueblo of Santa Clara, N. Mex. (165988).

HARDY, Maj. D. ELMO, New York, N. Y. (APO): A collection of miscellaneous specimens of insects made by the donor in India (166741); 50 prepared slides of mosquito material, including 41 species, 8 new to our collection (167249); 10 lots of insects (167336); 200 slides of mosquito larvae and male genitalia from Assam, representing species of 6 genera (167402); 8,000 insects (slides, adults, pupae, and larvae), a few crustaceans, cestodes, mollusks, mammals, and fishes (167481).

HARGROVE, MARION C., Washington, D. C.: 2 gold watches and a watch fob of the period 1840–1850 (167395).

HARKNESS, H. T. (See under Canadian Government, National Museum of Canada.)

HARLEY, Dr. G. W., Ganta Mission, via Monrovia, Liberia: (Through J. L. Chancellor) 42 Liberian hardwoods (165810).

HARLOW, RICHARD C., Cambridge, Mass.: Specimen of cultivated fern (165497).

HARRIS, AILEEN, Washington, D. C.: 1 crystal locket containing on one side a portrait of a man and on the other a lock of hair (166571).

HARRIS, GEORGE W., Washington, D. C.: 1 album, 1 pocket stereoscope, 51 portraits (166627).

HARRY, HAROLD W., Portland, Oreg.: 11 mollusks from Oregon (167401).

HARTLEY, WILLIAM. (See under Council for Scientific and Industrial Research.)

HARTMAN, Dr. OLGA, Los Angeles, Calif.: 500 amphipods (166527). (See also under Allan Hancock Foundation.)

HARVARD UNIVERSITY:

Arnold Arboretum, Jamaica Plain, Mass.: 3 plants from China (161-536, exchange); 10 photographs of plants (165794); 3 grasses from Fiji (166546, exchange); 218 plants mostly from Australia (167509, exchange).

Botanical Museum, Cambridge, Mass. (Through Chas. Schwinfurth) 4 plants, mostly type material (165-775).

Gray Herbarium, Cambridge, Mass.: 356 specimens of plants, including 129 photographs and plates (165-558, exchange); 3 photographs of plants (165916, exchange); 6 photographs of plants (165990, exchange) 226 plants (166802, exchange); (through Dr. M. L. Fernald) 5 plants from Brazil (166212, exchange); (through Dr. Lyman B. Smith) photograph of a plant

(165875); 116 plants from Texas and Mexico (167740, exchange).

Museum of Comparative Zoology, Cambridge, Mass.: 3 mollusks from Chanaral (165858, exchange); 84 specimens of frogs, mostly new to the collections (167137, exchange); (through Prof. Nathan Banks) 1 beetle (166639, exchange); (through Dr. Thomas Barbour) 321 fishes, cotypes (165405, exchange); (through Dr. Hubert L. Clark) 6 brittle-stars, all paratypes (167051, exchange); (through William J. Clench) 12 paratypes of fossil mollusks from subway excavation in Boston, Mass. (167204); (through Dr. Elisabeth Deichmann) 53 alcyonarians (166789, exchange).

HASBROUCK, Dr. E. M., Washington, D. C.: 10 surf scoters (167244).

HASTINGS MUSEUM, Hastings, Nebr.: (Through Dr. A. M. Brooking) 1 fresh-water mussel from the Republican River, Nebr. (167522).

HAUGHT, OSCAR L., Barranquilla, Colombia: 1,421 plants from Colombia (167171).

HAY, Dr. W. P., Bradenton, Fla.: 1 mole from Englewood, Fla., collected July 15, 1943 (166015).

HAYES, DORIS W., Washington, D. C.: 2 plants from the District of Colombia (166491).

HAYES, Mrs. LLOYD R., Washington, D. C.: A turning saw of the period about 1860 (167145).

HAYES, Dr. WAYLAND J., Jr., Charlottesville, Va.: 3 slides of Turbellaria (167188).

HENBEST, Dr. LLOYD G., Washington, D. C.: A Harvey exposure meter of about 1915 (167295).

HENRY, Dr. L. K., Pittsburgh, Pa. (See under Carnegie Museum.)

HERDLICK, J. A., Forney, Idaho: A specimen of granite porphyry from the Salmon National Forest, Lemhi County, Idaho (166870); (through Frank L. Hess) 2 specimens of porphyritic granite from Lemhi County, Idaho (166697).

HERRING, L. C., Boston, Mass.: 1 steel engraving by Paul Girardet after the painting "Washington Crossing the Delaware," by E. Leutze; published by Goupil & Co. in 1853 (165484).

HERRON, Pvt. WILLIAM A., Fort Washington, Md.: 1 miniature copy of the Holy Bible (224 pages of the New Testament) with microscopic print (166968).

HERSHKOVITZ, PHILIP. (See under Walter Rathbone Bacon Traveling Scholarship and Oswaldo Mestre.)

HERZ, MAX, New York, N. Y.: Pair of Peck & Snyder racing ice skates, c. 1889, steel blades, mahogany foot piece (167502).

HESS, Dr. A. D. (See under Tennessee Valley Authority.)

HESS, FRANK L., Washington, D. C.: Specimen of uraninite from Gordonia District, Cape Colony, South Africa, and one of phosphuranylite from Rio Grande do Norte, Brazil (167524); a collection of concretions from Berthier-en-Bas, stations 8 and 9, 25 miles from Lévis, Canada (167738). (See also under J. A. Herdlick and Dr. Charles L. Parsons.)

HESTER, J. PINCKNEY, St. George, Utah: 1 flowering specimen and 10 photographs of a new species of plant from Nevada (166551); 12 plants from the southwestern United States (167383).

HILDEBRAND, Dr. SAMUEL F. (See under Leo L. Guidey, Donald R. Johnson, and American Museum of Natural History.)

HILL, A. T. (See under Work Projects Administration.)

HILLIER'S SON CORPORATION, R., New York, N. Y.: A specimen of Grindelia, NF, for materia-medica collection (167526).

HINTON, JAMES C., Mexico, D. F.: 3 ferns from Mexico (166862).

HOBBS, Dr. HORTON H., Gainesville, Fla.: 6 crayfishes, comprising holotype, allotype, and paratype of 2 new species; 6 isopods and 1 flatworm (166027).

HOFF, Dr. C. CLAYTON, Quincy, Ill.: 23 slides of ostracods (166845).

HOFFMAN, ANITA M., Mexico, D. F.: 2 mites in alcohol (167687).

HOFFMAN, ARNOLD, Livingston, Mont.: 2 calcite groups and a calcite crystal from Clyde Park, Mont. (166175); 1 specimen of calcite from Palm Wash mining district, Truckhaven, Calif. (166069).

HOLLAND, GEORGE P., Kamloops, British Columbia: 1 paratype specimen of flea (158805).

HOLMGREN, Dr. ARTHUR H. (See under Utah State Agricultural College.)

HOPKINS MARINE STATION, Pacific Grove, Calif.: 1 crab from Monterey Bay (167579, exchange).

HORNSTEIN, Dr. LILLIAN HERLANDS, Washington Square, N. Y.: 1 facsimile copy of a children's book of 1792, "The Royal Alphabet," or "Child's Best Instructor," to which is added, "The History of a Little Boy Found under a Haycock" (166126).

HORTON, F. W., College Park, Md.: 9 specimens of bauxite and miscellaneous minerals from Dutch Guiana and other localities (166025, exchange).

HOTCHKISS, NEIL. (See under U. S. Department of the Interior, Fish and Wildlife Service.)

HOUSEHOLDER, VIC H., Phoenix, Ariz.: 1 bird skin (166301).

HOWELL, Prof. B. F., Princeton, N. J. (See under Princeton University.)

HUBBARD, C. ANDERSEN, Forest Grove, Oreg.: 1 gopher, 7 meadow mice, and 3 tree mice from Oregon (167131).

HUBBS, Dr. CARL L. (See under University of Michigan.)

HUBRICHT, LESLIE, Norfolk, Va.: Small collection of invertebrates (166913).

HUGHES, Prof. R. CHESTER, Stillwater, Okla. (See under Carl Cecil Riguey.)

HUGHES TOOL CO., Houston, Tex.: An exhibit complete with exhibition case and appropriate background showing the development of the Hughes rotary rock bits from 1909 to 1942 (5 original specimens, exhibition case with painted background) (166122).

HULTEN, Dr. ERIC, Lund, Sweden: 44 grasses from Alaska (165902, exchange).

HUME, MATILDA E., Washington, D. C.: A Chamorro basketry-weave mat and an old Spanish brass pitcher, both collected on the Island of Guam by donor about 1920; also a nest of lacquered wooden boxes collected in China about 1880 (167836).

HUNGERFORD, Dr. H. B., Lawrence, Kans.: 5 bugs, 4 adults and 1 nymph (166362).

ILLINOIS STATE ACADEMY OF SCIENCE, Champaign, Ill.: (Through Dr. Lyell J. Thomas) 2 parasitic worms (166807).

ILTIS, HUGH H., Fredericksburg, Va.: 19 fishes, 75 marine invertebrates, 2 mollusks, and 12 echinoderms collected by donor off Cape Henry, Va. (166959); 45 fossil mollusks and 1 clump of fossil barnacles from Virginia (167046); 200 bryozoans and ostracods from the Miocene at Yorktown, Va. (167082, exchange); (through Dr. C. Wythe Cooke) 7 specimens (3 species) of fossil mollusks from the Eocene of Belvidere Beach and Fairview Beach, Va. (166873).

IMPERIAL COLLEGE OF TROPICAL AGRICULTURE, Trinidad, B. W. I.: (Through Dr. E. McC. Callan) 17 scorpions collected on Trinidad (165552).

INDEPENDENT LITHOGRAPH CO., San Francisco, Calif.: 10 progressive proofs of 7-color offset lithograph, "The Charles Street Meeting House," reproduced from the water color by Dwight C. Shepler; 1 finished proof No. 10, limited edition; 7 zinc lithographic plates used in making print (165650).

INSTITUTO AGRONÓMICO DO NORTE, Belém, Brazil: (Through Dr. W. Andrew Archer) 547 plants from Brazil (166810, exchange).

INSTITUTO DE CIENCIAS NATURALES, Bogotá, Colombia: 22 plants from Colombia (166121, 166924, exchange); (Through Dr. Hernándo Gardia B.) 105 plants from Colombia (166650, exchange):

INTERIOR, U. S. DEPARTMENT OF THE: 69 plants from Alaska (166587).

Bureau of Mines, College Park, Md.: (Through Dr. Alton Gabriel) 1 specimen of jadeite from Asia (167414).

Fish and Wildlife Service, Chicago, Ill.; 8+ fragments of crayfishes (165288); specimen of a very rare neuropteroid (167320); 262 specimens of miscellaneous insects, mostly identified and consisting largely of beetles, collected by Ernest G. Holt in Brazil (167699); (through Isaac Ginsburg) 42 gobies from Cuba (167771); 624 mammals transferred by the Fish and Wildlife Service and entered in the Museum catalog, Nos. 273562 to 274185 inclusive, between July 1, 1943, and June 30, 1944 (167835); (through Dr. John W. Aldrich) 2 eggs of hooded merganser (165708); (through Missouri Cooperative Wildlife Research Unit) 2 coyotes collected in Missouri in 1943 (166184); (through Dr. Clarence Cottam) 30 ostracods (164627); (through D. G. Frey) large collection of marine invertebrates and 78 mollusks from Chesapeake Bay taken by the Potomac River Oyster Investigation (166167); (through Neil Hotchkiss) 9 ferns, mostly from Alaska (167417); 9 U. S. flowering plants (167711); (through O. J. Murie) 1 skeleton of a bird (165330); (through Dr. Victor B. Scheffer) 8 pearly freshwater mollusks from Tule Lake, Siskiyou County, Calif. (166988); (through Dr. Lionel A. Walford) head of hammerhead shark collected off San Marcos Island, Gulf of California, by Dr. Walford, October 2, 1942 (166522).

Geological Survey, Washington, D. C.: 1 lot of purple muscovite; 1 specimen of microlite in pegmatite; 1 lot of yttrium-bearing spessartite garnet from New Mexico (166647); 5 specimens of tungsten ores from Idaho, California, and North Carolina (167173); (through Dr. Charles Milton) one lot of weinschenkite from Kelly Bank near Vesuvius,

Va., collected by H. D. Miser, October 1941 (166488); (through Dr. John B. Reeside, Jr.) 80 Devonian invertebrates from the Dyer formation of northwestern Colorado (166890); (through W. W. Rubey) Hewettite specimens from 1½ miles west of Bloomington, Bear Lake County, Idaho (167442).

National Park Service, Washington, D. C.: 31 plants from the Grand Canyon, Ariz. (165959); (through Harry A. Beatty) a collection of miscellaneous insects collected on the Virgin Islands (166602).

IRONS, JOHN A., Thousand Island Park, N. Y.: 1 mollusk (167620).

IRVING, F. N., Washington, D. C.: 4 plants from Maryland (166213).

JACKSON, Col. H. NELSON, Burlington, Vt.: Winton automobile, 1903, which, driven by the donor, was the first automobile to cross the United States from San Francisco to New York, together with accessories and camping equipment used on the trip (167685).

JACKSON, Dr. H. W., Blacksburg, Va.: 375 fresh-water mollusks from Virginia, 51 isopods and a few insects (165977); approximately 550 fresh-water snails from Virginia (166695).

JACKSON, RALPH W., Cambridge, Md.: 8 mollusks from Ecuador (166528).

JACOBSON, MORRIS K., Rockaway, N. Y.: 75 land and fresh-water mollusks from New York and Connecticut (166272); 6 mollusks from Peekskill, N. Y. (165791, 166316).

JAHNS, RICHARD H., Penasco, N. Mex.: Specimen of kämmererite from Klamath Mountain region, Oreg. (165793).

JAVIER, Brother E., Medellín, Colombia: Small collection of insects from Colombia (166269).

JELLISON, Maj. W. L., Hamilton, Mont.: 144 miscellaneous insects collected in China and India (166027); 137 insects, 1 crustacean, 2 snakes 4 flatworms, and a small collection of mollusks from Yunnan and Assam (166987); 25 fresh-water mollusks, from Lake County, Mont. (167160).

JENNINGS, C. C., Kingston, R. I.: A small collection of larvae, pupae, and adults of a beetle (165511). (See also under Rhode Island Department of Agriculture and Conservation.)

JOHNS HOPKINS UNIVERSITY, Baltimore, Md.: (Through Dr. C. T. Berry) 37 type and figured specimens of American Postpaleozoic fossil echinoids (165847, deposit).

JOHNSON AUTOMATICS, INC., Boston, Mass.: (Through Chandler B. Gardiner) Johnson automatic rifle (166548).

JOHNSON, Lt. (jg) DAVID H., Washington, D. C. (See under Navy Department.)

JOHNSON, Ensign DONALD R., New River, N. C.: (Through Dr. S. F. Hildebrand) 3 shrimps (166654).

JOHNSON, MARY PAULINE, Grantwood, N. J.: Album showing needlework specimens (167113).

JOHNSON & JOHNSON, New Brunswick, N. J.: Specimens of adhesive plasters and of plain mercurochrome and sulfathiazole band-aids (167527).

JONES, GROVER C., Peterstown, W. Va.: 1 diamond crystal weighing 34.46 carats found in April 1928 in Peterstown (167553, loan).

JONES, M. L., Hamburg, Iowa: 6 pieces of red cedar wood from the Missouri Loess Bluff Area in Waubonsie State Park, Iowa (166857).

KADEN, HANS, Jenkintown, Pa.: 36 pictorial photographs for special exhibition during June 1944 (167601, loan).

KARLOVIC, John K., Chicago, Ill.: 1 pepper-and-salt moth (165673).

KARRER, Mrs. S., Washington, D. C.: (Through Dr. L. P. Schultz) 2 palatine teeth of a fossil fish from the Miocene of Calvert County, Md. (165738).

KEARNEY, Dr. T. H. (See under U. S. Department of Agriculture, Bureau of Plant Industry.)

KELLY, E. A. (See under Mrs. Delila Cooper.)

KENK, ROMAN, Río Piedras, Puerto Rico: 10 specimens of sea urchins (165832).

KENTUCKY, UNIVERSITY OF, Lexington, Ky.: (Through J. D. Figgins) 5 bird skins (165983); (through Prof. Frank T. McFarland) 4 grasses from Kentucky (167409, 167569, exchange).

KER, Mrs. GRAHAM M. (deceased): (Through Graham Ker) 16th-century Spanish vargueno cabinet-desk (166363).

KIENER, WALTER, Lincoln, Nebr.: Fern from Nebraska (166653).

KILLIP, E. P., Washington, D. C.: 304 plants from Brazil collected by A. Ducke (165876); 61 plants collected by Mrs. Ynes Mexia (166803); 17 ferns from Panama (166958); 48 plants mainly from Plummers Island, Md. (167026). (See also under Smithsonian Institution, National Museum.)

KIMBALL, S. L., San Francisco, Calif.: (Through Dr. V. D. P. Spicer) 2 marine shells from Christmas Island and Midway Island (165830).

KING, Lt. (jg) WILLIS, Fort Schuyler, N. Y.: 356 reptiles and amphibians from the United States (166960).

KLEEREKOPER, Dr. HERM., Porto Alegra, Brazil: A collection of amphipods, isopods, ostracods, cladocerans, copepods, and insects (164520); 4 crabs from Brazil (166267).

KLEIBER, HANS, Dayton, Wyo.: 48 etchings by Hans Kleiber, for special exhibition November 29, 1943, to January 2, 1944 (166405, loan).

KLOTS, Capt. ALEXANDER B., Maxton, N. C.: 176 specimens of mosquito material as follows: 86 adults of 20 species; 90 larvae of 10 species (166563).

KNOWLTON, Dr. GEORGE F., Logan, Utah. (See under Utah State Agricultural College.)

KOMP, Lt. Col. W. H. W., Ancon, Canal Zone: 21 mosquitoes (166125); a small collection of miscellaneous insects taken on Galápagos Islands during April and May 1943 (166580).

KRUKOFF, BORIS A., New York, N. Y.: 901 plants from Bolivia (165696, exchange); 19 ferns from Brazil (165917, exchange).

KUGLER, Dr. H. G., Pointe-a-Pierre, Trinidad, B. W. I.: (Through Dr. T. Wayland Vaughan) 20 slides of thin sections, 1 of uncut specimens of B. Caudr's cotypes, topotypes, and plesiotypes of Eocene larger Foraminifera from San Juan de los Morros, Venezuela (166181).

KUTZ, H. L., Delmar, N. Y.: 5 skins of meadow mice, 1 skull (167112).

LABAW, J. P., Little Rock, Ark.: Specimen of bauxite obtained from "lignite" stockpile near Bauxite, Ark. (167644).

LAGERLOEF, Col. HANS, New York, N. Y.: 2,333 postage stamps of the Philippine Islands (166333).

LANE, JOHN, São Paulo, Brazil: 22 adults and 4 slides of Brazilian mosquitoes (167480).

LANG, FLORENCE RAND (deceased): (Through Carl Moon) The Florence Rand Lang Collection of 26 paintings by Carl Moon of Apache, Navaho, and Pueblo Indians of Arizona and New Mexico (165827).

LANGFORD, DANIEL B., Denson, Ark.: 76 molluska from Arkansas and 27 from North Dakota (165914, 166179).

LA PLATA, EL MUSEO DE, La Plata, Argentina: 68 specimens of grasses from Argentina and Chile (167003, exchange).

LAPPE, WILLIAM M., Alexandria, Va.: 1 female black-widow spider found in Virginia (166340).

LAURENT, Mme. SUZANNE, Washington, D. C.: 1 waxbill (166369).

LAUSE, M. A., Dayton, Ohio: 2 self-loading, gas-operated, aircooled carbines (165356).

LAYBOURNE, W. LEE, Falls Church, Va.: 1 silver-haired bat collected at Falls Church, Va., October 5, 1943, by Mr. Laybourne (166185).

LEE, WILLIAM E., Alexandria, Va.: Model of the skipjack sloop *Carrie E. Price*, Baltimore, 1897 (167695).

LEECH, HUGH B. (See under Canadian Government, Department of Agriculture.)

LEMKE, RICHARD W., Arlington, Va.: 1 tourmaline and an aquamarine specimen from near Amelia, Va. (167766).

LEON, Rev. Brother, Vedado-Habana, Cuba: 123 grasses from Cuba (166612); (through Luis R. Rivas) 147 plants from Cuba (165576, 167152, 167734, exchange).

LEONARD, E. C., Washington, D. C.: 538 plants from Maryland (167775).

LEYVA, CARLOS J., Pluma Hidalgo, Mexico: 2 plants from Mexico (165779, 166089).

LIBBEY-OWENS-FORD GLASS CO., *Plaskon Division*, Toledo, Ohio: An illuminated mounted exhibit of 129 specimens and 17 photographs illustrating the manufacture and applications of urea-formaldehyde and melamine compound plastic resins, used for molding, gluing, bonding, and coating purposes (166991).

LIBRARY OF CONGRESS. (See under Mrs. W. E. Patterson.)

LILLY, ELI, & Co., Indianapolis, Ind.: 22 medicines for insulin and liver extract (166920).

LITCHFIELD, LAWRENCE, Jr. (See under Republic Mining & Manufacturing Co.)

LITTLE, Dr. ELBERT L., Jr., Washington, D. C.: 34 plants from Ecuador (166309, 166311).

LITTLE, LAURA REVERE, Brookline, Mass.: United States flag made in 1865 (166103).

LIZER Y TRELLES, CARLOS A., Vicente Lopez, Argentina: 15 insects, including 1 paratype and 3 species new to the collections (167182).

LLAVE, Ing. José MANUEL DE LA, Uruapan, Michoacán: 4 wasps (166054).

LOEBLICH, Dr. ALFRED R., New Orleans, La.: (Through Dr. A. K. Miller) 22 Lower Cretaceous cephalopods from Texas, including types and figured specimens (165688).

LOGGIE, HELEN A., Bellingham, Wash.: 16 etchings and 19 drawings for special exhibition, January 31 to February 26, 1944 (166761, loan).

LOOMIS, H. F., Coconut Grove, Fla.: 15 millipeds, including 1 type and 14

paratypes, representing 15 species (165652).

LORD, Mrs. MARY ALICE (deceased): (Through Rose H. Lord and William Craige Lord, Glen Burnie, Md.) "Stars and stripes" bordered, autograph quilt pieced in silk hexagon-patch pattern with U. S. flag center motif, signed by President Lincoln, the line generals and lieutenant generals of the U. S. Army, and by other important Americans, made before the Civil War in Nashville, Tenn., by the donor, who carried it through the lines to Cincinnati, and back to Tennessee after the fall of Fort Donelson (166550).

LORD, ROSE H. (See under Mrs. Mary Alice Lord.)

LORD, WILLIAM CRAIGE. (See under Mrs. Mary Alice Lord.)

LOS ANGELES MUSEUM OF HISTORY, SCIENCE, AND ART, Los Angeles, Calif.: 1 hermit crab with 3 rhizocephalid parasites attached; also 3 rhizocephalid parasites unattached (154448).

LOUISIANA STATE UNIVERSITY, Baton Rouge, La.: (Through Dr. Ellinor H. Behre) 6 fishes (165890); 2 Texas red-shouldered hawks (166399, exchange).

LUCIONI, LUIGI, New York, N. Y.: 40 etchings by Luigi Lucioni for special exhibition, February 28 to March 26, 1944 (166969, loan).

LUNZ, G. ROBERT, Jr., Charleston, S. C.: 4 crabs, 10+ porcellanid crabs, 12+ shrimps (165768); 1 stomatopod taken off Kiawah Island, S. C., September, 9, 1943 (166521).

LUTZ, JOHN C., Philadelphia, Pa.: 2 insects (167829, exchange).

LYNN, D. M., Cleveland, Ohio: United States Army and United States Military Academy uniforms and accessories of the early part of the 20th century (31 specimens) (166143).

LYNN, Dr. W. GARDNER, Brookland, D. C.: A collection of amphibians and reptiles from Jamaica and Honduras made in 1941 (166407).

MACCORD, Capt. H. A. (See under Carl P. Manson.)

MACCREARY, Lt. DONALD, New York, N. Y.: 1 mouse and 3 lizards collected at the Island of Fernando de Noronha, Brazil, October 1943 (166300).

MACGEE, Mrs. ADA VAN LOON BRANDOW, Washington, D. C. (See under Susan B. Anthony League Foundation.)

MACMILLAN, GORDON K., Pittsburgh, Pa.: 2 mollusks (166941).

MACNEIL, F. STEARNS, Washington, D. C.: 30 mollusks from Marianna limestone, Clarke County, Miss. (167413).

MACY, Prof. RALPH W., Portland, Oreg.: 22 mollusks from Oregon (166590).

MAINE, UNIVERSITY OF, Orono, Maine: (Through Dr. F. H. Steinmetz) 3 ferns from Maine (166641, exchange).

MALDONADO, J. (See under Federal Security Agency, U. S. Public Health Service.)

MANN, Dr. WILLIAM M. (See under E. F. Remington.)

MANSON, CARL P., and Capt. H. A. MACCORD, Washington, D. C.: Archeological materials, including two incomplete skeletons, from Keyser Farm site, Rileyville, Page County, Va. (167292).

MANTER, Dr. HAROLD W., Lincoln, Nebr.: 4 slides of helminthological specimens (165923); 4 specimens on 3 slides showing types and paratypes of trematodes (166930).

MARCIN, Mr. and Mrs. EDWARD J., Flushing, N. Y.: A group of limonite pseudomorph after siderite from Rockside Quarry at Roxbury Station, Conn. (166343).

MARCUS, ERNESTO, São Paulo, Brazil: 1 mollusk shell perforated by a bryozoan (166005).

MARDEN, LUIS. (See under National Geographic Society.)

MARIE-VICTORIN, Prof. FR., Montreal, Quebec: 29 plants from Cuba (166674).

MARSH, KATE SESSION (deceased): (Through Washington Loan & Trust Co.) 67 miscellaneous ethnological and period art specimens of antique glass, china, lace, silver, brass, nephrite, and basketry (166645, bequest).

MARSHALL, CORA, Pittsburgh, Pa.: 1 gold locket containing 2 tintypes, portraits of a man and woman (166570).

MARSHALL, ERNEST B., Laurel, Md.: 1 fox and 1 weasel collected at Laurel by Mr. Marshall in February and July 1943 (165961).

MARTIN, Miss JACKIE, Washington, D. C.: A #1 Panoram Kodak, Pat. 1894 (165852).

MARTIN, Sgt. JOEL, New York, N. Y.: 1 crab, 5 isopods, and 1 amphipod (166507).

MARTÍNEZ, Dr. MAXIMINO, Mexico, D. F.: 59 plants from Mexico (166541, 166654, 166676, 166921).

MARTZ, CHARLES S., Aurora, Mo.: 50 pictorial photographs (166294, loan).

MARY JOSEPH, Sister. (See under Mercy Hospital.)

MARYLAND ACADEMY OF SCIENCES, Baltimore, Md.: (Through Dr. E. H. Walker) 2 plants from Maryland 167559).

MARYOTT, HAROLD D., Miami, Ariz. (See under Castle Dome Copper Co.)

MASON, CHARLES, Baltimore, Md.: 1 crystal showing the octahedral habit of pyrite, sample from a quarry near Lexington, Va. (165600).

MATTHEWS, RANSOM, Los Angeles, Calif.: 11 specimens of historical motion-picture film (167681).

MAXON, Dr. WILLIAM R., Washington, D. C.: 3 plants from Maryland (167684).

MAYOR, A. HYATT, New York, N. Y.: An Edison wood-case telephone receiver, c. 1870 (166629).

MAYR, Dr. ERNST. (See under American Museum of Natural History.)

MAZZOTTI, Dr. LUIS, Mexico, D. F.: 2 paratypes of a new species of bug (165742); 1 wood rat (166575); 1 insect (166794, exchange).

McCLURE, Dr. F. A., Washington, D. C.: 2,500 grasses, mainly bamboos of economic importance, and a small collection of insects reared from bamboos, from tropical America (167092, collected for the Museum).

McCOMB, W. H., Alhambra, Calif.: 2 trap-door spider nests collected in California (165881).

McCORD, Mrs. JAMES B. (See under Anna McGowan.)

McCOY, THOMAS N., Hickman, Ky.: 2 bryozoans (166238).

McCULLOCH, JESSIE P., Longview, Wash.: 5 concretions with crab remains from the Tertiary rocks of southwest Washington (165962).

McDEVITT, JOSEPHINE. (See under Edith A. Wright.)

McDONALD, H. R., San Francisco, Calif.: 1 red-footed booby (166209).

McFARLAND, Dr. FRANK T. (See under University of Kentucky.)

McGOWAN, ANNA (deceased): (Through Mrs. James B. McCord, Washington, D. C.) 4-piece silver coffee service made by Browne & Seal, Philadelphia, about 1810, and a 19th-century bobbin-made Chantilly black-lace shawl (167322).

McGUIRE Co., GEORGE W., Whitestone, N. Y.: 3 lawn rakes made of white oak and other hardwoods, developed as substitutes for the once-popular bamboo rakes of Japanese origin (165661).

MEDINA, Dr. ROBERTO CORS, La Paz, Bolivia: 34 rodents from Bolivia (167833).

MELL, Dr. C. D. (See under Foreign Economic Administration.)

MERCY HOSPITAL, Des Moines, Iowa: (Through Sister Mary Joseph) 2 fly larvae collected in Mercy Hospital (165670).

MERTIE, Dr. J. B., Jr., Washington, D. C.: 1 specimen of spodumene and vivianite from Kings Mountain, Cleveland County, N. C. (167641).

MESSICK, BEN, Los Angeles, Calif.: 19 lithographs and 18 drawings for exhibition (167133, loan).

MESTRE, OSWALDO, Magdalena, Colombia: (Through Philip Hershkovitz) Shell disk beads and shell pendants from "huaca" in Guanahani, Río Ariguani, about 20 km. south of Pueblo Bello, Sierra de Santa Marta, Magdalena, Colombia (165602).

METALS RESERVE Co., Washington, D. C.: Collection of minerals and ores (167739).

MÉTRAUX, Dr. ALFRED, Washington, D. C.: 37 plants from Argentina (163218).

METROPOLITAN CAMERA CLUB COUNCIL, Rockville Center, N. Y.: 100 pictorial photographs, exhibited during January 1944 (166661, loan).

MICHENER, Lt. CHARLES D., Camp Shelby, Miss.: 12 mosquito larvae representing winter and summer forms (167049).

MICHIGAN, UNIVERSITY OF, *Museum of Zoology*, Ann Arbor, Mich.: (Through Dr. Carl L. Hubbs) 137 fishes from Venezuela, collected by F. F. Bond, 1938–1939 (167214, exchange); 267 fishes from northwestern Mexico collected during 1940 and 1942 by Dr. Ralph G. Miller (167679); (through Mrs. Helen T. Gaige) 135 frogs and 27 salamanders (167716, exchange); 5 ferns from British Honduras (121540, exchange).

MICHEL, R., Washington, D. C.: 1 ruby-throated hummingbird (167507).

MIDDLEKAUFF, Capt. WOODROW W., Fort McPherson, Ga.: 12 mosquitoes, representing 7 species (166672); 2 slides of mosquitoes (166401); 2 mosquitoes, holotype and allotype (166244); 13 vials of mosquito larvae and 3 pill boxes of adults, all from southeastern United States (165973); 25 slides of mosquito larvae (165987).

MILLER, Dr. A. K. (See under Dr. Alfred R. Loeblich.)

MILLER, GERRIT S., Jr., Washington, D. C.: 10 plants from Vermont and New York (165918); 57 small mammals collected at Dorset, Vt., in the summer of 1943 (166564); 4 chipmunks and a young opossum from District of Columbia (167832).

MILLER, LUCRETIA C., Rochester, N. Y.: 6 specimens of tatted lacework (167114).

MILTON, CHARLES. (See under U. S. Department of the Interior, Geological Survey.)

MINISTERIO DA EDUCAÇÃO E SAUDE, Rio de Janeiro, Brazil: (Through Dr. R. M. Taylor) 2 mosquitoes (made

holotype and female allotype), with larval skins of both (166256).

MISSOURI BOTANICAL GARDEN, St. Louis, Mo.: 1 plant from Colorado (165777, exchange).

MOLDENKE, Dr. HAROLD N., New York, N. Y.: 27 grasses from Pennsylvania 165706); 1 plant from Colombia (167769).

MONDOLFI, EDGARDO. (See under Cornell University.)

MONTGOMERY, ARTHUR, New York, N. Y.: An aquamarine gemstone from Boise County, Idaho, weighing 15.3 carats (166965).

MONTOYA, Dr. ANTONIO, Capuli, Colombia: (Through Dr. W. H. Wright) 22 insects (167475).

MOON, CARL, Pasadena, Calif. (See under Florence Rand Lang.)

MOORE, Dr. J. PERCY, Philadelphia, Pa.: 6 leeches (166760).

MOORE, WILLIAM J. (deceased), Nivloc, Nev.: (Through Desert Silver, Inc.) 1 crystal of scheelite from Nivloc (165553).

MOREIRA, Dr. CARLOS, Rio de Janeiro, Brazil: 45 amphipods and 1 isopod (166588).

MORRIS, JOHN V., Washington, D. C.: (Through Dorothy R. Swift) 1 fox squirrel collected at Bluemont, Va. (166052).

MORRISON, Dr. J. P. E., Washington, D. C.: 5 skins and skulls of the house mouse and skins and skulls of the white-footed mouse from Virginia (166871). (See also under National Speleological Society.)

MORSE, Dr. EDWARD E., Washington, D. C.: 6 French bronze medals of the period of World War I (166832).

MOSELEY, Maj. KIRK J., Washington, D. C. (See under War Department, Division of Preventative Medicine.)

MURIE, O. J. (See under U. S. Department of the Interior, Fish and Wildlife Service.)

MURRILL, Dr. W. A., Gainesville, Fla.: Plant from Florida (165498).

MUSEUM OF MODERN ART, New York, N. Y.: Special exhibition: "Bali; Background to War" (166188, loan).

MYERS, Mrs. JEROME, New York, N. Y.: 35 prints by Jerome Myers for special memorial exhibition, August 30 to September 26, 1943 (165920, loan); (See also under Dr. Harry H. Shapiro.)

NAGEL, WM. J., Bethesda, Md.: 1 combination set of lenses; 6 lenses, barrel, and set of stops, for varying focal length and angle of exposure (166544).

NASH, ARTHUR CLEVELAND, Washington, D. C.: An etching, "The Lost Chord," by Reginald Cleveland Coxe (165854).

NATIONAL GEOGRAPHIC SOCIETY, Washington, D. C.: (Through Luis Marden) 124 fishes from Nicaragua, including 3 sharks and 1 sawfish, 3 sawfish blades, and 2 snakes (165627, 165900, 166359); 49 fishes and 1 crustacean from El Salvador (166992).

NATIONAL LIVESTOCK AND MEAT BOARD, Chicago, Ill.: 16 pieces of table silverware and 3 doilies for the nutrition case (165488, 165736).

NATIONAL MUSEUM OF SOUTHERN RHODESIA, Bulawayo, Southern Rhodesia: (Through George Arnold) 122 ants, representing 32 species, of which 2 species are represented by paratypes (166519).

NATIONAL PHOTOGRAPHIC SOCIETY, Washington, D. C.: 145 pictorial photographs for exhibition during September 1943 (165921, loan).

NATIONAL PROCESS CO., New York, N. Y.: 1 color reproduction in offset lithography of "The Kill," a painting by Robert Benney (166785).

NATIONAL SPELEOLOGICAL SOCIETY, Washington, D. C.: 6 mollusks, 4 vials of crustaceans, and 54 vials of insects (166774); (through Dr. J. P. E. Morrison) 10 beetles collected in Long Cave, Kentucky, during August 1943 (165922).

NAVY DEPARTMENT, U. S., 14 specimens, U. S. Legion of Merit Decorations, each with button and ribbon to be worn in lieu of decoration (166910); (through Ensigns E. A. Behr and R. C. Smith) piece of wood containing 2 species of shipworms and 1 polychaete worm from Noumea, New Caledonia (166576); (through Lt. (jg) D. H. Johnson) 24 mammals, 4 birds, 8 reptiles and amphibians, and 1 crab from Florida and Georgia (166886).

Bureau of Ships: 1 wood sample of "carano" from Colombia (166172); 1 wood sample each of "essessang" from West Africa and of "wolar" from South America (167009); wood specimens of "araracanga," "tatajuba," and "piquia" from Brazil, and ironbark eucalyptus from Australia (167603).

Bureau of Yards and Docks: 1 small sample of "Madre Cerrna" wood from the Galápagos Islands (165640).

Coordinator of Research and Development: Special exhibit of emergency rescue equipment (167054, loan).

Naval Medical School: 17 rats and 2 mongooses (167120); 81 mammals, (rats and mice) from various sources (167284); 15 skins and 14 skulls of house rats from Washing-

ton, D. C., collected by O. A. Muennink (167337).

NEAVE, Dr. S. L., Kyuquot, Vancouver Island, British Columbia: Several parasitic worms (167669).

NEEDHAM, Dr. JAMES G., Ithaca, N. Y.: 16 Neotropical dragonflies, all determined (166518).

NEW YORK BOTANICAL GARDEN, New York, N. Y.: 1,667 sheets of plants from India, collected by Dr. R. R. Stewart (165561, 165884, exchange); 37 plants from Colombia (166872, exchange); 296 plants from the Great Basin region (167028, exchange); 4 plants from Argentina (167678).

NEW YORK STATE COLLEGE OF AGRICULTURE, Ithaca, N. Y.: 22 plants (166744, exchange).

NEW YORK STATE MUSEUM, Albany, N. Y.: (Through Dr. Winifred Goldring) 2 Devonian brachiopods from Australia; 2 specimens of recent snail, from Alaska (166078).

NEW YORK ZOOLOGICAL SOCIETY, New York, N. Y.: (Through Dr. William Beebe) 28 frogs from Venezuela and British Guiana (166748).

NICÉFORO MARÍA, Brother, Bogotá, Colombia: 34 bird skins (166628); 51 bird skins from Colombia (166700).

NICHOLS, JOHN T., and Dr. SAMUEL F. HILDEBRAND. (See under American Museum of Natural History.)

NICHOLSON, DONALD J., Orlando, Fla.: 4 sets of eggs of gull-billed tern and 1 nest of Florida redwing (165825).

NICOL, DAVID, Stanford University, Calif.: 5 slides of Foraminifera (166855).

NICOLAY, ALAN S., Montclair, N. J.: 4 insects (166562, exchange).

NOFTSINGER, FRANK A., Roanoke, Va.: 28 pictorial photographs (165754, loan).

NORTH CAROLINA STATE MUSEUM, Raleigh, N. C.: 1 beaked whale fetus, collected at Cape Hatteras, N. C., in 1940 (162555).

OFFICE OF THE COORDINATOR OF INTER-AMERICAN AFFAIRS, *Division of Health and Sanitation*, Washington, D. C.: (Through Dr. Raymond M. Gilmore) A small collection of mammals, a bird, and a few snakes from Bolivia (166387).

OFFICE OF WAR INFORMATION, Washington, D. C.: 3 war posters (165851).

OLIVEIRA PINTO, DR. OLIVERIO M. DE, São Paulo, Brazil. (See under Departamento de Zoologica.)

OLMSTED, DR. A. J., Washington, D. C.: 1 pocket Kodak, 1896 model; 1 roll of film of 1908, and 1 leather case (166321).

OLMSTED, HARRY H., Arlington, Va.: 1 De Vry 16-mm. motion-picture camera (166157).

OLSEN, Prof. O. WILFORD, Angleton, Tex.: 150 mollusks from Texas (166202).

O'NEILL, Dr. HUGH T., Washington, D. C. (See under Father Dutilly.)

ORCUTT, Mrs. C. R., San Diego, Calif.: 324 lichens from Jamaica (112573).

OSBORN, BEN, Glen Rose, Tex.: 17 grasses mostly from Oklahoma and Kansas (165352).

OSBURN, Prof. RAYMOND C., Columbus, Ohio: 1 mollusk from Put-in-Bay, Ohio (167332).

OSMENT, Capt. WILLIAM, Hollywood, Fla.: 35 mollusks from Cuba (167118, 167403).

OSORIO, Dr. J. M., Habana, Cuba. (See under University of Habana.)

OUTES, Dr. JULIO D., Salta, Argentina: A collection of *Aeglea* from La Quiaca, Jujuy, Argentina (166119).

OWNBEY, Dr. MARION. (See under State College of Washington.)

PACKARD, RALPH G., Morristown, N. J.: Whitworth rifle made in 1878 (165685).

PADULA, FIORAVANTI, Rio de Janeiro, Brazil: Crystal of muscovite from Chalet Verde mine, Espera Feliz, Minas Gerais, Brazil (166967).

PARKE, DAVIS & Co., Detroit, Mich.: 5 official tinctures and 4 official fluidextracts, for pharmacy collection (167557).

PARKER, H. L., Montevideo, Uruguay: 1 bird skin, Paraguayan snipe (165220).

PARODI, Dr. LORENZO R., Buenos Aires, Argentina: 18 grasses, mostly from Argentina (167012); 12 grasses from Argentina (167209, exchange).

PARSONS, Dr. CHARLES L., Washington, D. C.: (Through Frank L. Hess) A specimen of gold in fluorite from Stratton's Independence mine, Cripple Creek, Colo. (166371).

PARTRIDGE, WILLIAM T., Washington, D. C.: A carpenter's plane, c. 1800, Athens, Ga. (165658).

PATCH, E. L., Co., Boston, Mass.: 1 specimen of cod-liver oil, for the collection of animal drugs (167556).

PATTERSON, Mrs. W. E., Washington, D. C.: (Through Library of Congress) A fragment of a Spanish flag taken from *Morro Castle*, Habana, Cuba, in 1898 (166201).

PAULY, KARL A., Schenectady, N. Y.: 5 thin sections of Onondaga chert with fossil remains, from Berne and New Salem, N. Y. (167216).

PEABODY ENGINEERING CORPORATION, New York, N. Y.: (Through E. H. Peabody) A combination oil and gas

burner for industrial use and a sectioned oil atomizer of the same (165584).

PEARSON, Dr. T. GILBERT (deceased): 1 bird head and 1 bird skin (166327).

PEEK & VELSOR, INC., New York, N. Y.: A specimen of the rhizome and roots of Gentiana, USP, for materia-medica collection (167710).

PEGGS, A. DEANS, Nassau, Bahamas, B. W. I.: 26 shrimps, 1 crab, 2 flies (165840).

PENICK & Co., S. B., New York, N. Y.: Specimens of horseradish root, rue, and nutmeg (165533, 167508).

PENNSYLVANIA, UNIVERSITY OF, Philadelphia, Pa.: (Through Dr. Edgar T. Wherry) Fern from Oklahoma (167712, exchange).

PEPSI-COLA Co., Long Island City, N. Y.: Calendars for 1942 and 1944 with reproductions of paintings by well-known American artists (166554).

PERKINS, JOHN U., Washington, D. C.: 19 reproductions in rotary photogravure of paintings by old masters, published by Charles Letts & Co. about 1906 (165765).

PERRY, Dr. STUART H., Adrian, Mich.: 2 meteorites; New Westville, Preble County, Ohio, weight 4.8 kilograms, and Edmonton, Ky., 10.2 kilograms (166494); 2 meteorites, Penokee, Kans., 3,580 grams, and Cavour, S. Dak., 4,310 grams (166516); 1 mass of the Linwood, Nebr., meteorite (167622).

PFEIFFER, Lt. E. W., Camp Lejeune, N. C.: 37 birds and 1 bat from eastern Brazil (167482).

PHALEN, Mrs. JAMES M., Washington, D. C.: Navaho blanket acquired at Fort Wingate, Ariz., about 1896 (167525).

PHELPS, W. H., Caracas, Venezuela: 2 specimens of a Venezuelan warbler, 1 type on deposit, 1 paratype gift to Museum (166699, gift and deposit).

PIERCE, ROBERT E.: (See under Florida Power & Light Co.)

PITTIER, Dr. H., Caracas, Venezuela: 3,279 plants from Venezuela (165699, 166068, 166475).

PLYMOUTH CORDAGE Co., North Plymouth, Mass.: A 350-foot coil of 3-ply nylon rope similar to that now being used by the U. S. Army Air Forces for towing gliders (167719, loan).

PORTER, Dr. C. L. (See under University of Wyoming.)

POST OFFICE DEPARTMENT, Washington, D. C.: 13 sets of specimen stamps (1,444 specimens) received from the International Bureau and described in bulletins of that bureau (165574, 165704, 165824, 166136, 166289, 166584, 166762, 167096, 167344); 12 specimens of 5-cent commemorative postage stamps of Czechoslovakia, Luxemburg, Norway, and Poland (165894); 3 postage stamps of Bahamas, Barbados, and Newfoundland, received from Postal Administration of Great Britain (165997); 15 commemorative postage stamps of Belgium, France, Greece, Netherlands, and Yugoslavia (166475); 11 postage stamps of Barbados, Poland, and U. S. S. R. received respectively from the Postal Administrations of Great Britain, Poland, and U. S. S. R. (166477); 9 stamps, 3 each commemorative of Albania, Austria, and Denmark (166983); 2 Millionaire calculating machines patented 1895 (167157); 19 postage stamps and cards of the U. S. S. R. received from the Postal Administration of the U. S. S. R. (167540, 167672).

POTZGER, Prof. J. E., Indianapolis, Ind.: 206 grasses from Indiana (166717).

PRATT, HARRY D. (See under Federal Security Agency, U. S. Public Health Service.)

PRATT, Mrs. LUCY HOLDER, Winston-Salem, N. C.: Homespun cotton counterpane handwoven in an overshot pattern, "double bowknot," by the donor's grandmother, Lucy Newsome Doub, in 1833, at Guilford Battle Ground, near Greensboro, N. C. (165485).

PRINCE, F. M. (See under Federal Security Agency, U. S. Public Health Service.)

PRINCETON UNIVERSITY, Princeton, N. J.: (Through Prof. B. F. Howell) 7 Middle Cambrian fossils from the Cloud Rapids formation of Newfoundland (165724).

RANSFORD, ARTHUR N., White Plains, N. Y.: 56 bird skins from Ecuador (167379).

RAPP, FLOYD A., Washington, D. C.: 1 specimen of bauxite, from Paranam, Dutch Guiana (167140).

RAPP, WILLIAM F., Jr., Chatham, N. J.: 10 plants from New Jersey (167227).

RASETTI, Dr. FRANCO, Quebec, Quebec: 46 Cambrian and early Ordovician brachiopods from the vicinity of Lévis, Quebec (166139).

RAYNOLDS, EDWARD F., Central Valley, N. Y.: 6 pictorial photographs; "A Quaker Maid," "Old Salt," "Natures Drama," "Hale & Hearty," "The Recluse," and "Mike" (165709).

RAYONIER INCORPORATED, New York, N. Y.: A series of specimens, illustrating the chemistry and applications of refined alpha-cellulose from wood pulp, together with a photo-

graphic background and various installation fixtures (167269).

REEDER, Sgt. JOHN R., San Francisco, Calif. (APO): 41 grasses from New Guinea (167031).

REES, Lt. B. E., Washington, D. C.: A small collection of mosquitoes, beetles, and 1 spider from Goodenough Island, near New Guinea, collected by the donor (165874).

REESIDE, Dr. JOHN B. (See under U. S. Department of the Interior, Geological Survey.)

REHDER, Lt. GERHARD, New York, N. Y. (APO): 7 lots, 18 specimens, of land and marine shells from North Africa (166740).

REID, EARL D. (See under Smithsonian Institution, National Museum.)

REINHARD, Prof. E. G., Washington, D. C.: 11 crustaceans (166565).

REINHARD, H. J. (See under Texas Agricultural Experiment Station.)

REMINGTON, E. F., Perry Point, Md.: (Through Dr. W. M. Mann) Chipped stone artifacts from the Army Hospital Grounds at Perry Point, Cecil County, Md. (165735); chipped stone artifacts gathered on the Army Hospital Grounds, Perry Point (167608).

REPUBLIC MINING & MANUFACTURING Co., New York, N. Y.: (Through Lawrence Litchfield, Jr.) 8 specimens of French bauxite (167335).

REYNOLDS, ROBERT V. R., Washington, D. C.: A surveying compass with transit attachment and tripod, c. 1870, made by W. and L. E. Gurley (165452).

RHOADES, Dr. RENDELL, Put-in-Bay, Ohio: 25 type specimens of crayfish (166768).

RHOADES, WM., Indianapolis, Ind.: 2 insects (165412).

RHODE ISLAND DEPARTMENT OF AGRICULTURE AND CONSERVATION, Kingston, R. I.: (Through C. C. Jennings) 2 harvest mites (165823).

RICE INSTITUTE, Houston, Tex.: (Through Dr. Asa C. Chandler) 1 termite (165508); 1 katydid (165509).

RICHARDS, Dr. HORACE G., Philadelphia, Pa.: 3 specimens of a bryozoan from the Pleistocene of New Jersey (166470); 100+ amphipods and 1 hydroid (166788).

RICHMOND, Sgt. MARION, Arlington, Va.: 1 albino mole (165667).

RICKER, Dr. P. L., Washington, D. C.: Specimen of plant from Maryland (167560).

RIGGS, WILLIAM A., Little Rock, Ark.: 5 specimens of cinnabar from Arkansas (165763).

RIGUEY, CARL CECIL, Stillwater, Okla.: (Through Prof. R. Chester Hughes) 9 slides of cotype specimens of a cestode (165787).

RINEY, Pvt. THANE A., Proving Ground, Ill.: 1 hermit crab (166348).

RIPLEY, H. ERNESTINE, Scarsdale, N. Y.: 1 fossil crab from Fayum Desert, Egypt, collected by Walter Granger, 1907 (167630).

RITCHER, Dr. PAUL O., Lexington, Ky.: 14 beetle larvae and larval skins representing 6 species (166273); 17 beetles (167139).

RIVAS, LUIS R. (See under Reverend Brother Leon.)

ROBERTS, Lt. H. R.,: (See under War Department, Army Medical Center).

ROBERTS, Lt. (jg) JOHN P., Rapid City, S. Dak.: 1 Groesbeck's calculating machine, patented March 18, 1870, marked Ziegler & McCurdy (167256).

ROBINSON, W. O., Falls Church, Va.: 1 beryl crystal from Acworth, N. H. (166080).

ROEBLING, FUND, Smithsonian Institution, Washington, D. C.: 4 yellow, brown, blue, and green zircons, 1 brown olivine, 1 morganite, 1 sphalerite, 1 chrysoberyl, and 1 salmon-colored beryl (165613); a series of zircons, spinels, a sapphire, and a Mexican opal (165828); 8 scheelite crystals from Kernville, Kern County, Calif. (166360); a cut stone of scheelite weighing 18.7 carats from Kernville, Calif. (166487); a green beryl, a yellow garnet, and a blue spinel (166801); a 4-rayed star garnet from Emerald Lake, Idaho, weight 6.79 carats (166956); 4 quartz crystals from Sugar Loaf No. 1 claim, Dona Ana County, N. Mex. (166996); specimen of Cavour, S. Dak., meteorite (167011); 1 chrysoberyl from Brazil, 13.80 carats (167270, part gift, part exchange); 1 star spinel from Ceylon and 4 tourmalines from Brazil (167317); 1 emerald cat's-eye from Colombia, weight 4.55 carats (167394).

ROLLER, JANE, Takoma Park, D. C.: 1 cowbird (167830).

ROLLINS, EDGAR J., West Somerville, Mass.: 19th-century American flat-iron of the inventive period (167255).

ROOSEVELT, President FRANKLIN DELANO, Washington, D. C.: (Through Ralph E. Cropley) Ship's bulkhead lantern of R. M. S. *Mauretania*, brass with 3 beveled plate-glass windows (166146); 4 mounted fishes transferred from the waiting room at the White House (166533).

ROSENGURTT, Dr. BERNARDO, Monzon-Heber, Uruguay: 67 plants from Uruguay (165607, 166476); 143 plants from Uruguay and Argentina (166607,

167032, 167247, 167381, 167717, exchange).

ROSENWALD, MAURICE, New York, N. Y.: Copy of "The Hatchet"—collection of newspapers issued on board the U. S. S. *George Washington* during World War I (167097).

ROSS, Lt. EDWARD S., Santa Barbara, Calif.: 5 insects, 4 holotypes and 1 allotype (166471).

ROSS, Dr. H. H., Urbana, Ill.: (See under Tennessee Valley Authority.)

ROYAL ONTARIO MUSEUM OF PALEONTOLOGY, Toronto, Ontario: (Through Dr. Madeleine A. Fritz) Fragments of holotype of bryozoan (167130).

RUBBER DEVELOPMENT CORPORATION, Washington, D. C.: 2 trunk sections of highland chilte trees from Mexico (165530).

RUBEY, W. W. (See under U. S. Department of the Interior, Geological Survey.)

RUBIN, CHARLES, Washington, D. C.: A pair of pocket scissors combining 18 different tools, imported from Germany in 1921 (166703).

RUNYON, ROBERT, Brownsville, Tex.: 2 plants and fruit and seeds from another from Texas (166673, 166608).

RYNEARSON, GARN A., Grants Pass, Oreg.: A specimen of uvarovite from Blue Point claim, Tuolumne County, Calif. (166043).

ST. JOHN, Dr. EDWARD P., Potsdam, N. Y.: 5 plants from New York (165562, 165803, exchange)

SALTER, WILLIAM E., Washington, D. C.: A partial skeleton of an extinct sea-cow from the Calvert formation of Maryland (165846); 46 fresh-water mollusks collected at Marshall Hall, Md. (167694).

SAMPSON, A. H., Holyoke, Mass. (See under White & Wyckoff Manufacturing Co.)

SANBORN, Lt. COLIN C., Washington, D. C.: 1 fish from the Pacific Ocean off Point Parimas, Peru (167132).

SÁNCHEZ, José, Sadi-Carnot, Mexico: 47 plants from Mexico (167343).

SANDERS, BILL, Purdy, Mo.: 1 albino downy woodpecker (166509).

SARGENT, F. H., Washington, D. C.: 267 plants from Puerto Rico (166406, 166948).

SAWAYA, Dr. PAULO, São Paulo, Brazil: 42 specimens of *Aegles* (166719).

SAWYER, PHILIP A., St. Augustine, Fla.: 1 block model of a shrimp boat, 1 block model of a sponge boat, and 1 rigged model of a sponge boat, Tarpon Springs, Fla. (165514).

SCATTERGOOD, LESLIE W., Boothbay Harbor, Maine: 2 shrimps from Maine (167258).

SCHEFFER, Dr. VICTOR B. (See under U. S. Department of the Interior, Fish and Wildlife Service.)

SCHMITT, Lt. KARL, Phoenix, Ariz.: 65 archeological specimens from sand-dune hearth areas in Utah (167645).

SCHMITT, Dr. WALDO L., Washington, D. C.: 1 mollusk from Uruguay (165526).

SCHULTZ, JIMMY, Washington, D. C.: 1 fossil crab claw from the Miocene at Plumpoint, Chesapeake Bay, Md. (166485).

SCHULTZ, Dr. LEONARD P. (See under Mrs. S. Karrer and Smithsonian Institution, National Museum.)

SCHWARTZ, L. M., Washington, D. C.: Plant from Washington, D. C. (165887.)

SCHWARTZBACH, Dr. SAUL, Washington, D. C.: 760 specimens of fossil shells from Galápagos Islands (166141).

SCHWARZ, Dr. ERNST. (See under Lt. Comdr. J. M. Amberson.)

SCHWINFURTH, CHARLES. (See under Harvard University, Botanical Museum.)

SELBY, Dr. JOHN HUNTER, Alexandria, Va.: 5 specimens of historical X-ray apparatus (166701); 1 localizer, 1 Benoist penetrometer, 1 radiograph, and 1 pair of glass doorknobs for X-ray collection (166784); specimen of Lovibond's tintometer (perfected by Dr. Dudley Corbett) for the X-ray collection (167626).

SELF, Prof. J. TEAGUE, Norman, Okla.: 38 specimens of mollusks from the Tennessee River (166621).

SENN, Dr. ALFRED, Barbados, B. W. I.: Foraminifera and corals from the middle and old Eocene of Barbados (77 localities represented and 21 species of Foraminifera and 26 corals included); also Foraminifera and corals from the Oligocene and Miocene of Martinique (165721).

SERMET, Mrs. E., Washington, D. C.: 1 beetle collected at Palm Beach, Fla. (166065).

SEYBOLD, G. H., Harbel, Liberia: 1 flat skin of an African antelope (166771).

SHAFER, MINNIE M., Washington, D. C.: The saddlebags used by Dr. George M. Shafer, U. S. Army, in private practice in Ohio (166472).

SHAMEL, H. HAROLD, Washington, D. C.: Skin and skull of 1 cottontail rabbit from Maryland (167349).

SHAPIRO, Dr. HARRY H., New York, N. Y.: (Through Mrs. Jerome Myers) 3 prints by Jerome Myers, "Self-Portrait," etching; "Self-Portrait," lithograph; and "First Avenue Park," etching printed in color (166279).

SHARP, Prof. AARON J. (See under University of Tennessee.)

SHARP & DOHME, INC., Philadelphia, Pa.: An exhibit illustrating the manufacture and use of dried blood plasma (165849).

SHEARMAN, THOMAS G., Washington, D. C.: Kris-dagger and sheath from Malaysia collected before 1885 (165861).

SHELDON-CLAIRE Co., Chicago, Ill.: 31 war posters entitled "This is America" (167134).

SHELFORD, Dr. V. E., Champaign, Ill.: 17 isopods and 29 amphipods (165422).

SIDDALL, ALICE I., Washington, D. C.: B-flat rosewood clarinet with silver mountings made in the 70's by C. H. Eisenbrant, of Baltimore (167472).

SILBERSTEIN, Mrs. H., Greenbelt, Md.: 4 mollusks from Guam (165621).

SIMOES, JOSÉ FERRAZ, Rio de Janeiro, Brazil: 1 specimen of polycrase with its alteration product and 1 crystal of a pseudomorph possibly of columbite or tantalite from Municipio of Juiz de Fora at Fazenda Boa Vista, about 2½ km. northwest of Vargin Grande, Minas Gerais, Brazil (166966).

SKINNER, WILLIAM, & SONS, New York, N. Y.: An aviator's suit of heavy rayon satin: "Tackle Twill," a duplicate of one worn by Lt. Col. Wm. A. Lovelace, Air Force Surgeon, when he made a parachute jump from a Flying Fortress at an altitude of 40,200 feet, near Euphrata, Wash., in 1943, dull side out; quilted with a filling of down and processed chicken feathers (166583); 2 suit fabrics of rayon-faced cotton-backed twill and rayon-faced wool-backed double-weave serge (interlining) to be used with G. E. Army Air Force electrically heated F-2 and F-3 flying ensembles and an enlarged colored photograph of an Army bomber (167341).

SLAVIN, MAURICE, Washington, D. C.: A zircon, 3 crystals of tantalite, and a specimen of tapiolite from Paraíka, Brazil, and 1 specimen of simpsonite from Solidada, Brazil (167765).

SMITH, CHARLES F., Kingston, Pa.: 9 fossil-animal trails from the Chemung shale near Lanesboro, Susquehanna County, Pa. (167136, exchange).

SMITH, C. N., Bulls Island, S. C.: Young house rat from Bulls Island (167350).

SMITH, Dr. CHARLES PIPER, San Jose, Calif.: Photographs of 2 plants (166811, exchange).

SMITH, Mrs. FRANK C., Worcester, Mass.: Fern from Massachusetts (166492).

SMITH, Dr. LYMAN B. (See under Harvard University, Gray Herbarium.)

SMITH, G. STACE, Quebec, Quebec: 2 paratype specimens of beetles (167142).

SMITH, MAXWELL, Winter Park, Fla.: 1 mollusk from Panama Bay (167393).

SMITH, Ensign R. C. (See under Navy Department.)

SMITHE, GENEVA, Ann Arbor, Mich.: A collection of 15 pieces of American and European handmade laces (165551).

SMITHSONIAN INSTITUTION, Washington, D. C.: Photographs of the Russian scientist Kliment Arkadevich Timiryazev (1843–1920) and of his wife, his residences, and various books and documents connected with his career (166152, deposit); 1 Lauers patent revolving photograph cabinet, about 1870 (166486, deposit); 1 18" x 22" albumen print from a wet plate, an original W. H. Jackson, "Grand Canyon of the Yellowstone" (166553, deposit); 42 plants from Colombia (166894, deposit); 1 30" x 30" Benster plate holder used by solar eclipse expedition at Wadesboro, N. C., in 1900 (167183, deposit); 1 etching, "Stony Pasture," by Luigi Lucioni, the annual associate member's print of the Society of American Etchers (167185, deposit); 2 pairs of wrought-iron hinges and a bar handle strip from original entrance doors to Children's Room, Smithsonian Building (167321, deposit).

Bureau of American Ethnology: 3 old photographic lenses (167563).

National Collection of Fine Arts: 1 portrait of John William Draper; a fine engraving by John Sartain (166773).

National Museum, collected by members of the staff: Chapin, Dr. Edward A.: 70 insects and 90 fresh-water mollusks taken in Springfield, Mass., in July 1943 (165542); Cooper, Dr. G. Arthur: A collection of Cambrian, Devonian, Mississippian, and Permian fossils from Sonora, Mexico (165785); 500 Middle Ordovician fossils, including unusual crinoids and cystids from eastern Tennessee and southwestern Virginia (166370); Killip, E. P.: 2,052 plants from Venezuela (165605); Schultz, Dr. Leonard P., and Earl D. Reid (with Ensigns John H. and Frank C. Craighead, Jr.): 658 fishes from Patuxent River, Md. (165595); Wetmore, Dr. A., 11 birds, 1 chipmunk, and 1 mollusk from Shenandoah National Park (166182).

National Museum, made in Museum laboratories: A miniature model of a primitive oil refinery of William Barnsdal and W. H. Abbott built on the Parker Farm at Oil Creek, Pa., in 1860 (165692); cast of the type of a new comatulid and 2 casts of a crustacean from the Cretaceous of the Department of Cundinamarca, Colombia (167232); an album of 95 prints showing the building of the schooner *Blackfish* c. 1938; negatives lent by Mr. John M. Clayton (167397).

National Zoological Park: 9 bird skins, 68 bird skeletons, and 3 alcoholics (165783, 167380); 20 mammals (166016, 167709), 1 fish from West Africa (166651), 7 reptiles and amphibians (167768).

SOICE, REX, Chicago, Ill.: 1 Agfa color plate of 1924 and a reproduction therefrom (167263).

SOLAR, Dr. ENRIQUE DEL, Lima, Peru: (Through Dr. Ramon Ferreyra) 4 shrimps (165549).

SORENSEN, A., Pacific Grove, Calif.: 7 lots of barnacles (165407).

SOUKUP, Dr. J., S. S., Lima, Peru: 261 plants from Peru (165559, 166170, 167466).

SOUTHERN RAILWAY SYSTEM, Washington, D. C.: Collection of copper, chromium, manganese, and miscellaneous ores from southeastern United States (166861).

SOUTHWORTH, CHARLES, Thedford, Ontario: 1 Devonian clam (165746); 500 Middle Devonian brachiopods and 1 pelecypod from Ontario (166581).

SOXMAN, G. M., Dallas, Tex.: 9 ferns from Texas (164886).

SPEROS, JOHN, Washington, D. C.: An old silver watch having 3 dials and marked "Ancre 13 Pierres Rubis Houriet N 93257" (167262).

SPICER, Dr. V. D. P., San Francisco, Calif.: 325 specimens (including type of 1 new species) of marine shells from Midway, French Frigate Shoals in the Hawaiian group and Christmas Island in the Line Islands (167248). (See also under Glen L. Hall and S. L. Kimball.)

SPRINGER, STEWART, Homestead, Fla.: 35 fishes (160974).

SQUIBB & SONS, E. R., New York, N. Y.: Material to illustrate the manufacture of penicillin (166017).

STADNICHENKO, MARIA, Washington, D. C.: 33 slides and 1 vial of fossil larger Foraminifera from the Eocene of northwestern Peru (167552).

STALLINGS, DON B., Caldwell, Kans.: 12 butterflies, representing 6 species, all types (166623).

STANFORD UNIVERSITY, Stanford University, Calif.: 1 cultivated fern (165604, exchange); 20 specimens, paratypes of 11 species, of marine mollusks from the Miocene of California, described by Dr. Myra Keen (166180, exchange).

STAR FUSE CO., New York, N. Y.: 1 cellulose acetate test plier (167424).

STEARNS, J. L., (See under U. S. Department of Agriculture.)

STEERE, Dr. WILLIAM C., Washington, D. C.: 1 plant (166997).

STEINMETZ, Dr. F. H. (See under University of Maine.)

STEPHENSON, Dr. L. W., Washington, D. C.: 11 chert artifacts and rejects of Edwards limestone (Lower Cretaceous; exposed in Edwards Plateau) from Comal and Guadalupe Counties, Tex., collected by Dr. Stephenson on October 18, 1911 (166183).

STEVENS & Co., J. P., New York, N. Y.: 7 examples of plain, twill, crepe, and fancy weaves made of blended yarns in various combinations of viscose and acetate rayons with aralac (made from casein) and wool produced in South Carolina mills (165974).

STEVENSON, FRANK V., Chicago, Ill.: 5 Devonian brachiopods from southern New Mexico (166942).

STEWART, Col. HARRY, Cuernavaca, Morelos: 158 ethnological specimens and 1 lot of 23 photographs collected by Edwin F. Myers in 1938 during a 3 months' sojourn among the Huichol Indians in northern Jalisco, Mexico (164789).

STIRLING, M. W., Washington, D. C.: Fishes, snake, frogs, 2 lizards, leech, crab, and 2 insects collected on the Upper Río de las Playas, Mexico (167774).

STOKEY, Dr. ALMA G., South Hadley, Mass.: 4 ferns (104243).

STONE, ERNEST C., Helena, Mont.: 6 mollusks from near Dillon, Mont. (165599).

STOTTLEMEYER, MARGARET A. R., Washington, D. C.: Single weave, jacquard type coverlet, "lilies and stars," bearing woven name and place "Andrew Corick Middletown, Frederick County, Maryland," in lower corners; and a cotton quilt, appliqued in conventional rose pattern, made by the donor's sister (167647).

STUMM, Dr. ERWIN C., Oberlin, Ohio: 65 invertebrate fossils from the Devonian (Detroit River formation) of north-central Ohio (166758).

STUNTZ, Lt. STEPHEN C., Jr., San Francisco, Calif. (APO): 2 butterflies from New Guinea, both new to the Museum's collection (166633).

SUSAN B. ANTHONY LEAGUE FOUNDATION, Washington, D. C.: (Through Mrs. Ada van Loon Brandow MacGee) Silk banner, plaster plaque, and framed silhouette associated with the history of woman's suffrage in the United States (164793).

SWANTON, Dr. JOHN R., Washington, D. C.: Archeological material, chiefly potsherds, from various Indian sites in southeastern United States, including certain lots from sites on or near the presumed route of De Soto's expedition of 1539–42, and provisionally identified with towns mentioned by the Spaniards (165802); stone elbow pipe with cherry wood stem made by the Natchez Indian Watt Sam in 1915 and presented by him to Dr. Swanton (167837, loan).

SWIFT, DOROTHY R., Washington, D. C. (See under John V. Morris.)

SWINGLE, Dr. W. T., Washington, D. C.: 43 mosses from Kansas (166957).

TAFT, CHARLES P. (See under Mrs. William Howard Taft.)

TAFT, Mrs. WILLIAM HOWARD, Washington, D. C.: (Through Charles P. Taft) A collection of 17 Javanese, Moro, and other oriental brasses; also 1 inscribed silver vase bearing the hallmark of Chester, England (165833).

TANNER, Dr. VASCO M., Provo, Utah. (See under Brigham Young University.)

TARZWELL, Dr. CLARENCE M. (See under Tennessee Valley Authority.)

TAYLOR, Dr. R. M. (See under Ministerio da Educação e Saude.)

TEETERS, ROBERT, Melrose Park, Pa.: An incomplete skeleton of white-tailed jack rabbit (165844).

TENNESSEE, UNIVERSITY OF, Knoxville, Tenn: (Through Prof. Aaron J. Sharp) 49 specimens of grasses (165774, exchange); 152 plants from Virginia, South Carolina, and Tennessee (166156, exchange).

TENNESSEE VALLEY AUTHORITY, Decatur, Ala.: (Through Dr. Clarence M. Tarzwell) 69 turtles and 1 salamander from Wheeler Reservoir (166663); (through Dr. A. D. Hess) 2+ jellyfishes (166722); (through Dr. H. H. Ross) 19 vials of aquatic insects collected by Dr. J. S. Dendy (165999).

TEXAS AGRICULTURAL EXPERIMENT STATION, College Station, Tex.: (Through H. J. Reinhard) Small collection of miscellaneous insects collected in Australia by C. J. Burgin (167085).

TEXAS MEMORIAL MUSEUM, Austin, Tex.: One slice, 142 grams, of the San José, Tamaulipas, Mexico, meteorite (166848).

TEXAS STATE BOARD OF HEALTH, Austin, Tex.: (Through Dr. S. W. Bohls) 60 insects, representing 6 species (166600, exchange), 4 slides of insect specimens (166943).

TEXAS, UNIVERSITY OF, Austin, Tex.: 54 plants, mostly from Texas (165501, exchange); 460 plants from Mexico (167351, exchange); 1,137 plants, mostly from Texas (167116, exchange); (through Dr. Fred A. Barkley) 40 plants from Texas (167043, exchange), 54 plants collected in the Chisos Mountains of Texas by C. H. Muller; 63 plants, mostly from Texas (167184, part gift and part exchange); 32 grasses from Texas (167207).

TEXTILE COLOR CARD ASSOCIATION OF THE UNITED STATES, New York, N.Y.: Standard Color Card, 9th edition (revised 1941), containing dyed swatches of crepe-back satin for matching to fabrics having either shiny or dull surfaces (167646).

THOM, Mrs. CORCORAN, Washington, D. C.: 3 pieces of pottery "excavated at Copan, Honduras" (167535).

THOMAS, Dr. B. O. A., New York, N. Y.: 1 Currier and Ives lithograph, "The Holy Sepulchre" (165536).

THOMAS, Dr. LYELL J. (See under Illinois State Academy of Science.)

THOMSON, JOHN P., Colville, Wash.: 6 Carboniferous fossils, brachiopods, and crinoidal debris, from northeastern Washington (166484).

TIDD, Dr. WILBUR M., Columbus, Ohio: 4 parasitic copepods (166379).

TILLER, RICHARD E., College Park, Md.: 1 fish taken in a pond net at Cedar Point Hollow, Chesapeake Bay (165635).

TISSOT, Dr. A. N. (See under Agricultural Experiment Stations, Gainesville, Fla.)

TITTLE, WALTER, Danbury, Conn.: 42 drypoints and 1 etching, from which 35 drypoints were selected for special exhibition, October 25 to November 28, 1943 (166245, loan); 18 drypoints and 1 etching by Walter Tittle (167135).

TOLMAN, R. P., Washington, D. C.: 1 embossed folder containing 8 reproductions of etchings, these made by deep etched offset lithography, combined with die-stamping, and originally issued by Nature Magazine (166404).

TOMLINSON, W. HAROLD, Springfield, Pa.: 1 specimen each of marialite, stilbite, natrolite, and chabazite from Perkiomenville, Pa. (165632, exchange).

TOWNSEND, Dr. C. H. T., São Paulo, Brazil: (Through Capt. David G. Hall) 1,844 flies, mostly from Brazil (166056).

TRAPIDO, Lt. HAROLD, Camp Davis, N. C.: 24 tree frogs and toads from Washington (167004).

TREASURY DEPARTMENT, *Bureau of the Mint*, Washington, D. C.: 30 specimens of U. S. coins dated 1943 (167141); 9 United States gold coins struck during the period 1854–1907 (167826).

TROPICAL FOREST EXPERIMENT STATION, Río Piedras, Puerto Rico: 3 plants cultivated in Puerto Rico (167225).

TRUITT, Dr. R. V., College Park, Md.: 40 isopods from Louisiana (167429).

TUCKER, Mrs. ARLOWEIN W. (See under Mrs. Elizabeth Kennett Wray.)

TUBVER, Mrs. H. R., Santa Cruz, Calif.: 12 mollusks from Scotts Creek Beach, Santa Cruz County, Calif. (166693); 6 mollusks from Mexico and California (167512).

TUTHILL, Dr. L. D., Ames, Iowa: 15 insects representing 9 species, all paratypes (166638).

TWITCHELL, KARL S., New York, N. Y.: Fragment of Hamyarite bronze plaque and alabaster carving and 16 potsherds from near the ancient Hamyarite site of That-el Okt-el Hodood, Nejran, Asir, Saudi Arabia (165557, loan).

UDERITZ, GEORGE W., Vienna, Va.: One sample each of Guineawood, plain-sawed teak, and quarter-sawed teak (165622).

UNION DIESEL ENGINE CO., Oakland, Calif.: (Through O. H. Fischer) Model of an open crosshead cylinder developed by the Union Gas Engine Co. of Oakland, Calif., for large distillate and gasoline engines of about 1915 (166083).

UNITED SERVICE ORGANIZATIONS, Washington, D. C.: Third Anniversary Exhibit, January 20–January 31, 1944, comprising arts and crafts of service people made in the various U. S. O. centers (166772, loan).

UNIVERSAL WINDING CO., Providence, R. I.: 14 specimens of wire coils illustrating various products of Universal automatic coil winding machines (167169).

UNIVERSITY OF MONTREAL, Montreal, Quebec: 55 plants from Cuba (166231, exchange).

URDANG, Dr. GEORGE, Madison, Wis.: 37 prints pertaining to the life history of Carl Wilhelm Scheele, apothecary chemist (165747).

URIBE, Dr. LORENZO URIBE, S. J., Bogotá, Colombia: 12 plants from Colombia (165807, 165841).

USINGER, Dr. R. L., Davis, Calif.: 1 specimen (slide) of a bug (165554); 1 beetle larva, collected in a termite gallery beneath the bark of a pine stump at Rincon, Ga., May 30, 1943 (165556).

UTAH STATE AGRICULTURAL COLLEGE, Logan, Utah: (Through Dr. George F. Knowlton) 2 beetles, paratypes (167084); (through Dr. Arthur H. Holmgren) 4 plants from Nevada (166350, exchange).

VAIDEN, M. G., Rosedale, Miss.: 2 nests of indigo bunting (165660).

VALDÉS, FERNANDO ARATA. (See under Mr. Coope.)

VALENCIA, Dr. JUAN IGNACIO, Bloomington, Ind.: 20 grasses from Chile and Argentina (167246).

VALENTINE, Dr. J. M., Washington, D. C.: 22 beetles, including 10 paratypes (166111).

VAN DEUSEN, Col. E. S., Detroit, Mich. (See under War Department.)

VARGAS C., Dr. C., Cuzco, Peru: 11 plants and 18 beetles from Peru (167057, 167106, 167674).

VARGAS, Dr. LUIS, Mexico, D. F.: 1 mosquito larva (167415, exchange).

VAUGHAN, Dr. T. WAYLAND. (See under Alabama Geological Survey, R. Wright Barker, and Dr. H. G. Kugler.)

VICTORIA PROVINCIAL MUSEUM, Victoria, British Columbia: 3 leeches, 8 flatworms, 3 bryozoans, and 7 amphipods (166266).

VINES, ROBERT A., Houston, Tex.: 25 plants from Texas (165926).

VIRGINIA FISHERIES LABORATORY, Williamsburg, Va.: 5 crabs (166012).

VISEL, GLADYS O., Washington, D. C.: Specimen of cultivated shrub (167593)

VLADYKOV, Dr. VADIM D., Montreal, Quebec: 3 cephalopods (156738).

VOGEL, MORTON, Washington, D. C.: 3 insects—1 fly, 2 Hymenoptera (165567).

VOKS—U. S. S. R. SOCIETY FOR CULTURAL RELATIONS WITH FOREIGN COUNTRIES, Moscow, U. S. S. R.: 6 war posters produced by hand stencil process (167088).

WADSWORTH, ROSE, Hallowell, Maine: Small collection of dragonflies made by the late Mattie Wadsworth of Manchester, Maine (166787).

WAGNER, Dr. H. O., Mexico, D. F.: 3 bird s eggs (167245).

WAGNER, Ensign WARREN H., Washington, D. C.: 115 ferns from West Virginia, Cuba, Puerto Rico, Trinidad, British Guiana, and Venezuela (165560, 165976, 166200, 166644, 167002, 167568); 53 butterflies, representing 23 species (167250).

WALFORD, Dr. LIONEL A. (See under U. S. Department of the Interior, Fish and Wildlife Service.)

WALKER, CLARA R., Wellesley Hills, Mass.: 2 hand-woven, jacquard type coverlets; a blue-and-white, single and double weave combination in

"Medallions" pattern; and a red-and-white, double-weave "Tyler Coverlet" having the weaver's mark, an American eagle, and a name, place, and date woven in two corners, indicating it was made in Oswego County, N. Y., in 1845, for Cynthia Walker, the donor's paternal grandmother (166318).

WALKER, Dr. E. H., Washington, D. C.: 6 plants from the eastern United States (165710); 5 plants (167561). (See also under Maryland Academy of Sciences.)

WALKER, ERNEST P., Washington, D. C.: 10 hamsters raised in captivity by donor (166014, 166574).

WALKER, ROBERT SPARKS, Chattanooga, Tenn.: 6 amphipods (166356).

WALKLEY, LUELLA, Chevy Chase, Md.: 1 beetle collected by donor in Washington, D. C., July 17, 1943 (165707).

WALLACE, Hon. HENRY A., Washington, D. C.: 2 robes made from small strips of vicuña skin, presented to Vice President Wallace on the occasion of his good-will tour to South America in May 1943, by Miss Rosa Prado, daughter of the President of Peru (165809); 2 gold models, each on its silver base, presented to Vice President Wallace by the Chamber of Commerce in Bolivia on the occasion of his visit to La Paz in April 1943; both models reflect the Tiahuanaco style (165872).

WALTER RATHBONE BACON TRAVELING SCHOLARSHIP, Smithsonian Institution: 2,331 mammals, 29 fishes, 1 parasitic worm, 61 reptiles, a collection of insects, and 30 archeological and human skeletal specimens collected in the States of Magdalena, Bolívar, and Atlantico, Colombia, by Philip Hershkovitz, Bacon Scholar 1941–43 (161484, 166374).

WAR DEPARTMENT: 54 adult mosquitoes from New Guinea and Australia (165495); Army Nurse and Women's Auxiliary Army Corps coats and uniforms of the period of World War II (149 specimens) (166142, 167648).

Adjutant General's Office, Washington, D. C.: 5 medals of award, each with ribbon bar and lapel button, viz, U. S. Air Medal, and Legion of Merit, Chief Commander, Commander, Legionnaire, and Officer (167318).

Army Medical Center, Washington, D. C.: (Through Lt. H. R. Roberts) 270 adults and 95 larvae of mosquitoes collected in the Australasian region (165493).

Army Medical Museum, Washington, D. C.: (Through Maj. H. A. Davis) 16 snakes sent from General Hospital No. 20, India (166367); 3 snakes and 1 eel collected by Lt. C. G. Eddy, General Hospital No. 20, India (166560); 1 snake from New Guinea received from Lt. Col. Anselm W. Keefe (166846).

Army Medical School, Washington, D. C.: (Through Capt. Luther S. West) 30 mosquitoes (166518).

Division of Preventative Medicine, Washington, D. C.: (Through Major Kirk J. Moseley) 9 mosquitoes (3 adults, 6 larvae) (165494).

Fourth Service Command Medical Laboratory, Fort McPherson, Ga.: (Through Maj. Stanley J. Carpenter) 73 larval slides and 30 vials of mosquito larvae in 40 species from the southeastern United States (167828).

Office of Chief of Ordnance, Washington, D. C.: (Through Col. E. S. Van Deusen) 1 Army ¼-ton 4 x 4 truck ("jeep") (167398).

Office of the Quartermaster General, Army Service Forces, Washington, D. C.: 34 pieces of captured German and Japanese military equipment (167554, loan).

WAR PRODUCTION BOARD, *Lumber and Lumber Products Division*, Washington, D. C.: Samples of 12 commercial woods of Cuba (165623).

WAR SHIPPING ADMINISTRATION, Washington, D. C.: U. S. Merchant Marine Distinguished Service Medal, Mariner's Medal, and Merchant Marine Emblem, each with service bar and certification card (167235).

WARREN, WALTER C., Black Diamond, Wash.: 1 lot of boehmite-bearing clay from Washington (167767).

WASHINGTON LOAN & TRUST CO., Washington, D. C. (See under Kate Session Marsh.)

WASHINGTON, STATE COLLEGE OF, *Department of Botany*, Pullman, Wash.: (Through Dr. Marion Ownbey) 95 plants from Canada (166067, exchange); (through William A. Weber) 294 plants from the western United States (166531, exchange).

WATSON, CHARLES, Washington, D. C.: 1 bat (165801).

WATSON, MRS. HARRY L., Washington, D. C.: 1 swift, umbrella type, of hard wood, believed to have come from a farm home at Easton, Mass. (166319).

WEAVER, JOHN, Elk Springs, Colo.: One specimen of gilsonite from White River, Moffat County, Colorado (166931).

WEBER, WILLIAM A. (See under State College of Washington.)

WELLS, Dr. JOHN W., Columbus, Ohio: 76 fossil and recent corals collected by

Dr. Hollis Hedberg, embracing 14 holotypes, 12 paratypes, 27 figured specimens, and other specimens (165723); holotype of coral from the Middle Cretaceous Buda limestone of Texas (166317).

WEST, Capt. LUTHER S., Washington, D. C. (See under War Department, Army Medical School.)

WETMORE, Dr. A., Washington, D. C.: 1 white-throated sparrow (166275); 1 jumping mouse collected in Fairfax County, Va., October 17, 1943 (166578). (See also under Smithsonian Institution, National Museum.)

WHEELER, H. E. (See under Arkansas Geological Survey.)

WHERRY, Dr. EDGAR T., Philadelphia, Pa.: Fern from Pennsylvania (165886). (See also under University of Pennsylvania.)

WHITE, BURDETTE E., Merced, Calif.: 4 beetles (167159); 2 beetles, male and female paratypes (167205).

WHITE, Dr. O. E., Charlottesville, Va.: 4 plants from Brazil (165697).

WHITE & WYCKOFF MANUFACTURING Co., Holyoke, Mass.: (Through A. H. Sampson) Copies of calendars issued for the years 1932, 1934, 1935, 1936, 1937, 1940, 1943, and 1944, with illustrations of artistic and historic interest (167191).

WILLIAMS, Sgt. MILO W., Sarasota, Fla.: A large collection of marine invertebrates, fishes, mollusks, and echinoderms (166430, 166646).

WILLIAMSON, Lt. WALTER, Washington, D. C.: 9 mollusks from Brazil (167045).

WORK PROJECTS ADMINISTRATION, Washington, D. C.: (Through A. T. Hill) Pottery sherd samples from various Indian village sites in Nebraska and South Dakota; excavated by W. P. A. and Nebraska State Historical Society (166141).

WRAY, Mrs. ELIZABETH KENNETT (deceased): (Through Mrs Arloweine W. Tucker) Mounted hair-work "Memorial Wreath," period of 1878, made at the Montgomery Female College, Christiansburg, Montgomery County, Va., by the donor's mother, Mollis J. Meedor, when she was 14 years old (167396).

WRIGHT, EDITH A., and JOSEPHINE MCDEVITT, Washington, D. C.: 39 early American military prints on sheet music, for exhibition August 2 to 29, 1943 (165756, loan).

WRIGHT, L. M., C. E. M., New York, N. Y. (F. P. O.): 1 mollusk (165703).

WRIGHT, M. L., Carlsbad, N. Mex.: 9 smoky quartz crystals from the Capitan Mountains near Lincoln, N. Mex. (166081).

WRIGHT, M. L. Miami, Fla.: 15 marine shells from Florida (167254).

WRIGHT, Dr. W. H. (See under Federal Security Agency, U. S. Public Health Service, and Dr. Antonio Montoya.)

WYOMING, UNIVERSITY OF, Laramie, Wyo.: 229 plants, mostly from Wyoming (167029, exchange); (through Dr. C. L. Porter) 1 plant from New Mexico (166155, exchange).

YALE UNIVERSITY, *School of Forestry*, New Haven Conn.: 5 wood samples (166622, exchange).

YARROW, J. R., Washington, D. C.: Plant from New York (167770).

YOUNG, Lt. E. S., San Francisco, Calif. (F. P. O.): 2 mollusks (167189).

YOUNG, JAMES BARCLAY, Stonington, Conn.: Proto-Nazca bowl from an unknown site in Peru (165908).

ZETEK, JAMES, Balboa Heights, Canal Zone: 300+ land isopods and many small insects (165594).

ZODAC, PETER, Peekskill, N. Y.: 3 specimens of mesolite from Oregon and 1 specimen each of thomsonite and stilbite from New York (167233).

PUBLICATIONS ISSUED BY THE UNITED STATES NATIONAL MUSEUM DURING THE FISCAL YEAR 1943–44

REPORT

Report on the progress and condition of the United States National Museum for the fiscal year ended June 30, 1943. 8vo, iii+108 pp. January 1944.

BULLETINS

Bulletin 183. Archeological investigations in Platte and Clay Counties, Missouri. By Waldo R. Wedel. With appendix, Skeletal remains from Platte and Clay Counties, Missouri. By T. Dale Stewart. 8vo, viii+284 pp., 22 figs., 50 pls. October 1, 1943.

Bulletin 184. The metallography of meteoric iron. By Stuart H. Perry. 8vo, vii+206 pp., 9 figs., 78 pls. February 15, 1944.

Bulletin 185, part 1. Checklist of the coleopterous insects of Mexico, Central America, the West Indies, and South America. Compiled by Richard E. Blackwelder. 8vo, xii+188 pp. March 7, 1944.

Bulletin 185, part 2. Checklist of the coleopterous insects of Mexico, Central America, the West Indies, and South America. Compiled by Richard E. Blackwelder. 8vo, pp. 189–341. June 30, 1944.

PAPERS PUBLISHED IN SEPARATE FORM

FROM VOLUME 20, CONTRIBUTIONS FROM THE UNITED STATES NATIONAL HERBARIUM

Part 1. Taxonomic studies of Tropical American plants. By C. V. Morton. Pp. i–xi, 1–86. March 23, 1944.

FROM VOLUME 91 OF THE PROCEEDINGS

Title page, table of contents, and index. Pp. i-viii, 521–529. October 26, 1943.

FROM VOLUME 93 OF THE PROCEEDINGS

Title page, table of contents, and index. Pp. i-viii, 621–668. November 29, 1943.

FROM VOLUME 93 OF THE PROCEEDINGS

Title page, table of contents, and index. Pp. i-viii, 609–647. April 13, 1944.

No. 3167. New species of buprestid beetles of the genus *Agrilus* from Trinidad. By W. S. Fisher. Pp. 375–380. July 26, 1943.

No. 3168. Some fungus beetles of the family Endomychidae in the United States National Museum, mostly from Latin America and the Philippine Islands. By H. F. Strohecker. Pp. 381–392, fig. 12. August 5, 1943.

No. 3169. Summary of the collections of snakes and crocodilians made in Mexico under the Walter Rathbone Bacon traveling scholarship. By Hobart M. Smith. Pp. 393–504, figs. 13–15, pl. 32. October 29, 1943.

No. 3170. The North American parasitic wasps of the genus *Tetrastichus*—a contribution to biological control of insect pests. By B. D. Burks. Pp. 505–608, figs. 16–21. October 26, 1943.

FROM VOLUME 94 OF THE PROCEEDINGS

No. 3171. Catalog of human crania in the United States National Museum collections: Non-Eskimo people of the Northwest Coast, Alaska, and Siberia. By Aleš Hrdlička. Pp. 1–172. April 6, 1944.

No. 3172. The catfishes of Venezuela, with descriptions of thirty-eight new forms. By Leonard P. Schultz. Pp. 173–338, figs. 1–5, pls. 1–14. February 11, 1944.

No. 3173. Revisions of two genera of chalcid-flies belonging to the family Eupelmidae from North and South America. By A. B. Gahan. Pp. 339–369. November 26, 1943.

No. 3174. New species of American scolytoid beetles, mostly Neotropical. By M. W. Blackman. Pp. 371–399, pls. 15–17. November 22, 1943.

No. 3175. A revision of the Embioptera, or web-spinners, of the New World. By Edward S. Ross. Pp. 401–504, figs. 6–156, pls. 18–19. January 19, 1944.

No. 3176. Twelve new species of Chinese leaf-katydids of the genus *Xiphidiopsis*. By Ernest R. Tinkham. Pp. 505–527, fig. 157. April 29, 1944.

FROM VOLUME 95 OF THE PROCEEDINGS

No. 3178. New American cynipids from galls. By Lewis H. Weld. Pp. 1–24, pls. 1–2. April 15, 1944.

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Pp. 1–24,